

# Missouri Southern State College

1983-1985 Catalog



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# COLLEGE CALENDAR 1983 - 1985

#### **SUMMER SESSION 1983**

June 2	Day & Evening Registration
June 6	Class Begin
June 9	Last Day For Class Changes & Late Registration
June 21	Withdrawal After This Date No Refund of Fees
July 4	4th of July Holiday
	Last Day to Drop With a "W"
	Last Day of Classes
July 28	Final Examinations

#### **FALL SEMESTER 1983-1984**

	Faculty Study Conference Day & Evening Registration
	Day Registration
August 25	
	Last Day For Class Changes & Late Registration
September 5	Dismissal For Labor Day
	Withdrawal After This Date No Refund of Fees
	Dismissal For Fall Vacation
October 28	Last Day to Drop With a "W"
November 23,24,25	Dismissal For Thanksgiving Holiday
November 28	Classes Resume
December 14	Last Day of Classes
December 15	Open (No Classes-No Finals)
December 16,19,20,	21 Final Examinations
December 21	End of Semester

#### SPRING SEMESTER 1983-1984

January 16	Faculty Study Conference
January 17	
January 18	
January 19	Classes Begin
January 25 Last Day For Class	
February 22 Withdrawal After	This Date No Refund of Fees
March 12-16	Spring Break
March 28 l	ast Day to Drop With a "W"
May 9	Last Day of Classes
May 10	
May 11,14,15,16	
May 16	End of Second Semester
May 18	Commencement (7:00 p.m.)

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#### **SUMMER SESSION 1984**

June 4	Day & Evening Registration
June 5	Classes Begin
June 18	Last Day For Class Changes & Late Registration
June 20	. Withdrawal After This Date No Refund of Fees
July 4-5	4th of July Holiday
July 9	Last Day to Drop With a "W"
July 30	Last Day of Classes
July 31	Final Examinations

#### FALL SEMESTER 1984-1985

August 20	Faculty Study Conference
August 21	Day & Evening Registration
August 22	Day Registration
August 29	Last Day for Class Changes & Late Registration
	Dismissal For Labor Day
September 27	Withdrawal After This Date No Refund of Fees
October 8	Dismissal For Fall Vacation
October 26	Last Day to Drop With a "W"
November 21,22,23	Dismissal For Thansgiving Holiday
November 26	Classes Resume
December 12	Last Day of Classes
December 13	Open (No Classes-No Finals)
December 14,17,18,	19 Final Examinations
December 19	End of Semester

#### SPRING SEMESTER 1984-1985

anuary 14 Faculty Study Conference
anuary 15 Day & Evening Registration
anuary16 Day Registration
anuary 17 Classes Begin
anuary 23 Last Day For Class Changes & Late Registration
February 27 Withdrawal After This Date No Refund of Fees
March 11-15 Spring Break
March 27 Last Day to Drop With a "W"
May 8 Last Day of Classes
May 9 Open (No Classes-No Finals)
May 10,13,14,15 Final Examinations
May 15 End of Second Semester
May 17 Commencement (7:00 p.m.)

# Missouri Southern State College

JOPLIN, MISSOURI



OFFERING BACCALAUREATE
AND ASSOCIATE DEGREES

CATALOG OF

General Information and

Announcement of Courses

1983-1985

#### **FOREWORD**

This catalog presents general information, requirements for admission and graduation, and course offerings for the academic year of 1983-85, beginning June 1, 1983. The register of administrative officers and instructors is for the 1982-83 year. The College reserves the right to amend regulations and change fees when necessary.

# **EQUALITY OF OPPORTUNITY**

Missouri Southern State College does not discriminate on the basis of sex, race, creed, color, national origin, or the handicapped in the education programs or activities which it operates. The College strives to build a community in which opportunity is equalized and to use its facilities and resources to develop the skills of the members of all groups so they may play responsible and productive roles in society. This policy is relevant to all of the College's services and facilities which are available to every student enrolled.

The College adheres to the requirements of the Civil Rights Act of 1964, Equal Opportunity Act of 1972, Title IX of the Education Amendments of 1972, the Rehabilitation Act of 1973, and the Governor's Executive Order of 1973. In October 1973 the Board of Regents established an Affirmative Action Committee and in the Fall semester of 1975 a Title IX Officer was designated to assure the enforcement of equal opportunity policies and affirmative action and to avoid or eliminate disciminatory practices.

### **DIRECTORY INFORMATION**

The following paragraph is taken from a letter written by the Executive Department, United States Government, April 15, 1975 to institutions of higher education:

"1. EDUCATION RECORDS: Public Law 93-568 amends Public Law 93-380 (General Education Provisions Act) and permits schools to maintain directory information concerning students. Only after the school has given public notice that directory information will be released on students are schools permitted to do so. This information would consist of such data as the student's name, address, date and place of birth, major field of study, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended. Directory information may be released by the school without an educational release statement, unless...the student has informed the school that such information may not be released...without his...prior consent..."

Missouri Southern State College will include the following as "Directory" information:

Student's Name

Address

Telephone Number

Date & Place of Birth

Next of Kin or Spouse (Emergency Only)

Major Field of Study

Dates of Attendance

Degrees and Awards Received

Most Recent Previous Educational Agency or Institution Attended

# CORRESPONDENCE DIRECTORY

## MISSOURI SOUTHERN STATE COLLEGE JOPLIN, MISSOURI 64801 Telephone: Area 417-624-8100

Admission of students Alumni affairs Altletic activities Business affairs and purchases Catalog and bulletins Credit evaluation and	Director of Alumni Affairs Director of Athletics Vice President for Business Affairs
Credit evaluation and transcripts	Registrar
Employment, on Cambus	
(Student part-time)	Office of Financial Aids
Evening session	Coordinator of Evening Session
raculty appointments	Vice President for Academic Affaire
I mancial alus	Office of Einancial Aida
Gifts and annuities	Procident
Housing	Director of Hausian
Loans	Office of Financial Aid
Offeritation	Director of Academia Camillan
Placement services	Director of Placement Services
Public Information	Director of Public Information
Student organizations	Assistant Doop of Students
Summer session	Coordinator of Summer Services
Testing	Director of Academic Camilla
Veterans affairs	Director of Academic Services
	Academic Services

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# MISSOURI SOUTHERN STATE COLLEGE

1983-1985

# **BOARD OF REGENTS**

Glenn D. Wilson - 1983
Jerry E. Wells - 1984
Loren Olson - 1985
Anthony Kassab - 1986
William Putnam, Jr. - 1987
W. Terry James - 1988
\*Donald R. Patterson - Secretary

# **BOARD OF TRUSTEES**

Fred G. Hughes
Arthur Kungle, Sr.
Carolyn D. McKee
Donald R. Patterson
Elvin Ummel
Jerry E. Wells
\*Appointed by Board of Regents

# **ADMINISTRATIVE STAFF**

Julio S. Leon President Floyd E. Belk Vice President for Academic Affairs Harold Cooper Associate Vice President Paul R. Shipman Vice President for Business Affairs Glenn D. Dolence Dean of Students
Ray A Malzahn Dean, School of Arts and Sciences John W. Tiede Interim Dean, School of Business Administration Edward P. Merryman Interim Dean, School of Education and Psychology James K. Mupin Dean, School of Technology Robert H. Nickolaisen Assistant Dean, School of Technology
William L. Ferron Head, Department of Biology Richard W. Massa Head, Department of Communications Edward P. Merryman Head, Department of Education Steven H. Gale Head, Department of English F. Joe Sims Head, Department of Fine Arts J. Larry Martin Head, Department of Mathematics Vernon D. Baiamonte Head, Department of Physical Sciences Judith L. Conboy Head, Department of Social Sciences Max D. Oldham Head, Department of Physical Education James T. Volskay Head, Department of Psychology
Elmer E. Rodgers Head Librarian Ross C. Snyder Director of Instructional Media Charles E. Nodler Archivist Barbara A. Wales Circulation Librarian Mary Lou Dove Periodical Librarian Elizabeth J. Mueller Processing Librarian Arlene E. Moore Reference Librarian
Kreta C. Gladden Director of Alumni Affairs David C. Bingman Director of Continuing Education, Conferences and Workshops Gwen E. Hunt Director of Public Information George H. Volmert Registrar W. Sue Billingsly Interim Director of Missouri Southern Foundation
Douglas M. Carnahan Assistant Dean of Students Irma J. Hartley College Nurse Larry K. Karst Counselor James L. Frazier Director of Men's Athletics Lorine V. Miner Director of Placement Sallie L. Beard Director of Women's Athletics
Eugene C. Mouser Director of Academic Services Richard D. Humphrey Director of Admissions Myrna L. Dolence Director of Academic Development James E. Gilbert Director of Student Financial Aids Deborah D. Dinitto Financial Aids Counselor

Teresa A. McLean	
C. Elaine Freeman	
C. Elaine Freeman	Courselor
Charles D. Moss	
Sidney S. Shouse	Controller
Ron Foster	Director of Office Services
Karen Myers	Director of Safety & Security
Douglas Coen	Personnel Records
David Throop	
Howard Dugan	. Director of Physical Plant



(The date indicates the first year of service at this college.)

Julio S. Leon (Professor)	
A.B., Universidad Tecnica (Santiago, Chile)	
M.B.A., North Texas State University	
Ph.D., University of Arkansas	

President 1969

Floyd E. Belk (Professor) Vice President for Academic Affairs
B.S., Pittsburg State University
M.S., Pittsburg State University
Ed.D., Oklahoma State University

Paul R. Shipman (Professor) Vice President for Business Affairs 1965
B.S.E., Southwest Missouri State University
M.S., Pittsburg State University
Ed.D., University of Arkansas

# Christine B. Ackiss (Instructor) B.S.N., University of Connecticut M.S.N., University of North Carolina

Nursing 1981

David L. Ackiss (Assistant Professor)
A.B., Davidson College
M.A., College of William and Mary
Ph.D., Duke University

English 1981

Roger E. Adams (Associate Professor)
B.S.I.T., Pittsburg State University
M.S., Pittsburg State University
Ed.S., Pittsburg State University
Ed.D., Oklahoma State University

Automotive Technology 1967

Lawrence R. Albright, II (Associate Professor)
B.S., Northwest Missouri State College
M.S., University of Nebraska
Ph.D., University of Nebraska

Celia Ann Allman (Instructor)
B.S.N., University of Missouri
M.A., Bradley University
M.S.N., Northern Illinois University

Nursing 1982

Carol J. Anderson (Assistant Professor)
B.S., University of Minnesota
M.A., University of Minnesota
Ph.D., Utah State University

**Education 1981** 

Stephen C. B. Atkinson (Assistant Professor)

B.A., Wesleyan University
Ph.D., Indiana University

Loyal C. Auman (Instructor)

B.S.Ed., Pittsburg State University

M.S., Pittsburg State University

Brian C. Babbitt (Associate Professor)

B.A., Western Washington State College

M.A., University of New Mexico

Ph.D., University of New Mexico

Vernon D. Baiamonte (Professor)
A.B., Colorado State College
M.A., Colorado State College
Ph.D., Indiana University

Chemistry
Head, Physical Science Dept.

Ray B. Balhorn (Assistant Professor)

B.U.S., University of Utah

M.F.A., University of California at Los Angeles

Michael E. Banks (Associate Professor)

B.S., Oklahoma State University

M.S., New Mexico Highlands University

Ph.D., University of Kansas

William A. Barrow (Instructor)
B.S.Ed., University of Missouri
M.Ed., University of Missouri

Wiley A. Beals (Instructor) Radiologic Technology
Graduate Burge Protestant Hospital School of Radiologic Technology
Registered Radiologic Technologist
American Registry of Radiologic Technologists

Sallie L. Beard (Assistant Professor)

B.S., Missouri Southern State College

M.S., Pittsburg State University

Physical Education 1972

Director of Women's

Athletics

John H. Behle (Instructor)

B.S.Ed., Northeast Missouri State University

M.A.Math Ed., Northeast Missouri State University

David C. Bingman (Associate Professor)

B.S., Pittsburg State University

M.S., Pittsburg State University
Ed.D., University of Arkansas

Director of
Continuing Education
Conferences and
Workshops

Safwat W. Bishara (Visiting Associate Professor) B.S., Cairo University

Chemistry 1982

M.S., Cairo University Ph.D., AinShams University (Cairo)

Harold W. Bodon (Associate Professor)

Foreign Languages 1971 Soccer Coach

B.A., University of Utah M.S., California State University Hayward Ph.D., Brigham Young University

Rochelle L. Boehning (Associate Professor)

Mathematics 1967

 B.S., Pittsburg State University
 M.S., Pittsburg State University
 Graduate Study, Illinois Institute of Technology, University of Arkansas, University of Wisconsin

G. Joyce Bowman (Assistant Professor)
B.S., Southwest Missouri State University

Theatre 1967

B.S., Southwest Missouri State University M.A., University of Arkansas Graduate Study, University of Missouri, University of Kansas

Milton W. Brietzke (Associate Professor)

Director of Theatre 1956

A.B., San Jose State College M.A., Western Reserve University Doctoral Study, University of Denver

Willis D. Calicott (Instructor)

Computer Science 1976

B.B.A., Syracuse University M.B.A., Syracuse University

SFC Jack L. Cantrell (Instructor)

Military Science 1980

Douglas M. Carnahan (Assistant Professor)
A.B., Bowling Green State University
M.Ed., University of Georgia
Ed.S., Pittsburg State University
Ed.D., Candidate, Oklahoma State University

Assistant Dean of 1978 Students

Carmen M. Carney (Associate Professor)
B.S., Catholic University of Puerto Rico
M.A., University of Iowa
Ph.D., University of Iowa

Foreign Languages 1974

Albert J. Carnine (Assistant Professor)
B.M.E., Illinois Wesleyan University

M.M., Southern Methodist University M.M.E., Southern Methodist University D.M.A., University of Texas Music 1977

Art 1979 Val A. Christensen (Assistant Professor) Director of Spiva Art B.F.A., University of Nebraska, Lincoln Center M.F.A., Wichita State University Theatre 1977 Samuel L. Claussen (Instructor) A.B., Missouri Southern State College B.S., Missouri Southern State College M.F.A., University of Virginia Art 1970 Nathanial S. Cole (Associate Professor) B.F.A., Kansas City Art Institute M.F.A., Kansas City Art Institute **Business Administration 1967** Edith M. Compton (Assistant Professor) B.S., Pittsburg State University M.S., Pittsburg State University Ed.S., Pittsburg State University Sociology 1969 Judith L. Conboy (Associate Professor) Head, Social Sciences B.A., Pittsburg State University Dept. M.S., Pittsburg State University Ed.S., Pittsburg State University Ph.D., Kansas State University History 1968 Harold Cooper (Professor) **Associate Vice President** A.B., Berea College for Academic Affairs Ph.D., University of Nebraska English 1970 Jimmy C. Couch (Associate Professor) A.B., Texas Tech University M.A., Texas Tech University Ph.D., University of South Carolina Director of 1967 John M. Cragin (Associate Professor) B.S., United States Military Academy, West Point Data Processing B.S., Missouri Southern State College M.S., Purdue University Ed.D., University of Arkansas **Business Administration 1978** E. Carolyn Cunningham (Instructor) B.S., Missouri Southern State College M.S., Pittsburg State University C.P.A.

Elliott A. Denniston (Associate Professor)

A.B., Princeton University M.A., University of Michigan Ph.D., University of Michigan English 1974

Deborah D. Dinitto (Instructor) B.S., Emporia State University M.S., Emporia State University

Financial Aids Counselor 1981

Darral A. Dishman (Assistant Professor)
B.F.A., Kansas City Art Institute
M.S., Pittsburg State University

Art 1966

Glenn D. Dolence (Professor)
B.S., Missouri Valley College
M.S., Pittsburg State University
Ed.D., University of Arkansas

Dean of Students 1969

Myrna L. Dolence (Assistant Professor)
B.S., Pittsburg State University
M.S., Pittsburg State University

Director of 1973 Academic Development

Mary L. Dove (Assistant Professor)
B.S., University of Missouri
M.A., University of Missouri
M.S., Pittsburg State University

Periodical Librarian 1969

J. Steve Earney (Instructor) Director of Computer Center 1981
B.B.A., University of Arkansas
M.B.A., University of Central Arkansas
C.D.P.

Leland D. Easterday (Associate Professor)
B.S., Northeast Missouri State College
M.A., Southern Illinois University
Ed.D., University of Arkansas

**Education 1967** 

Doris T. Elgin (Associate Professor)

B.S., in Nursing, University of Tennessee

M.A., Memphis State University

M.S.N., Texas Woman's University

Nursing 1968

**Music 1968** 

A.B., University of Missouri
M.S., University of Arkansas
Ph.D., University of Arkansas

Mary A. Elick (Instructor)

B.S.E., Southwest Missouri State University

M.S., University of Arkansas

13

William C. Elliott(Associate Professor)

B.M.E., Pittsburg State University

M.M., Pittsburg State University

Doctoral Studies, University of Northern Colorado

Ronald R. Ellis (Instructor)

B.S., Pittsburg State University
M.S., Pittsburg State University

Mary M. Ensminger (Instructor)
B.A., Marquette University
B.S., Loyola University
M.S., University of Missouri

David L. Evans (Instructor) Physical Education 1982
B.S., Missouri Southern State College Assistant Football Coach
M.S., Northwest Missouri State University

William L. Ferron (Professor)

B.S., Creighton University
M.A., Southern Methodist University
Ph.D., Kansas State University

Carl A. Finke (Associate Professor)
B.S.B.A., University of Arkansas
J.D., University of Oklahoma
CPA

Business Administration 1970
Business Administration 1970

Richard H. Finton (Assistant Professor)
A.B., Northwestern State University
M.E., Northwestern State University
Graduate Study, University of Nebraska, Omaha

Patricia Knowles Forster (Assistant Professor)
B.A., Michigan State University
M.A., Bowling Green State University

Jon H. Fowler (Assistant Professor)

B.S., Southwest Missouri State University
M.F.A., University of Arkansas

James L. Frazier (Assistant Professor)
A.B., University of Wichita
M.A., Wichita State University

Physical Education 1971
Director of Men's Athletics
and Head Football Coach

C. Elaine Freeman (Instructor) A.B., Pittsburg State University
M.S., Pittsburg State University

June M. Freund (Instructor)

B.S.B.A., Missouri Southern State College
B.S.P.A., University of Arkansas
M.B.A., Pittsburg State University

Steven H. Gale (Professor)	English	1980
A.B., Duke University M.A., University of California at Los An Ph.D., University of Southern California	Head, English Dept.	1700
E. Sam Gibson (Associate Professor) B.S., Pittsburg State University M.S., Pittsburg State University Ph.D., Kansas State University	Biology	1967
Rodney R. Giesselmann (Instructor) B.S.E., Concordia Teachers College M.S., Fort Hays State University	Physical Education Assistant Football Coach	1979
James E. Gilbert (Assistant Professor)  A.B., University of Missouri  M.A., Southwest Missouri State Universit  Ed.S., Pittsburg State University	Director of Financial Aids	1974
Kreta C. Gladden (Assistant Professor) B.S., Missouri Southern State College M.B.A., Pittsburg State University Graduate Study, University of Arkansas	Alumni Director	1974
Larry W. Goode (Assistant Professor) B.S., Pittsburg State University M.S., Pittsburg State University	Business Administration	1968
James W. Gray (Assistant Professor) B.S., Dana College M.B.A., University of Arkansas	Computer Science	1982
George C. Greenlee (Assistant Professor) A.B., Northeast Louisiana State College M.A., Northeast Louisiana State College	English	1970
Betsy Q. Griffin (Assistant Professor) A.B., East Carolina University M.A., University of South Carolina Ph.D., University of South Carolina	Psychology	1978
Kathleen G. Grim (Instructor) B.S.E., Northeast Missouri State University M.A., Northeast Missouri State University		1975
Conrad E. Gubera (Associate Professor) B.S., Pittsburg State University M.S., Pittsburg State University Ph.D., Oklahoma State University	Sociology	1967

Gregory L. Hamilton (Assistant Professor) Business Administration 1980 A.B., Southern Illinois University M.S., Southern Illinois University

Ph.D., Candidate, Oklahoma State University

James L. Harbin (Assistant Professor)
B.S., Arkansas State University
M.B.A., Arkansas State University
Ph.D., University of Arkansas

Henry L. Harder (Professor)

A.B., Subiaco College

M.A., University of Arkansas
Ph.D., University of Maryland

Wayne A. Harrell (Associate Professor)

B.M.E., Wichita State University

M.M.E., Wichita State University

Ed.D., University of Northern Colorado

Robert A. Harris (Assistant Professor)

B.M., Pittsburg State University
M.S., Pittsburg State University
Pupil of Rosina Lhevinne

Pete Havely (Assistant Professor)

B.M.E., Central Oklahoma State University

M.M.E., Central Oklahoma State University

Band Director

Garry J. Hess (Instructor)

B.S., Fort Hays Kansas State College

M.A., Pittsburg State University

Robert O. Highland(Professor)
B.M.E., University of Oklahoma
M.M.E., University of Oklahoma
Ed.D., University of Arkansas

T. L. Holman (Associate Professor)

A.B., Southwestern College, Winfield, Kansas

M.A., Pittsburg State University

Ed.D., Oklahoma State University

Delores A. Honey (Instructor)

B.S., Southwest Missouri State University

M.E., University of Missouri

Business Administration 1980

Richard D. Humphrey (Assistant Professor)

B.S., Pittsburg State University

M.S., Pittsburg State University

Director of 1968
Admissions

Duane L. Hunt (Assistant Professor) Theatre 1964 A.B., Southwest Missouri State University M.A., University of Arkansas Betty J. Ipock (Assistant Professor) Nursing 1978 B.S.N., Drury College Director of Nursing M.S.N., Oklahoma University Ed.D., Oklahoma State University James R. Jackson (Associate Professor) Biology 1976 B.S., Colorado State University M.A., University of Northern Colorado Ph.D., Rutgers: The State University of New Jersey Marilyn J. Jacobs (Instructor) Nursing 1967 B.S.N., University of Nebraska M.S.N., University of Oklahoma Jasbir S. Jaswal (Associate Professor) **Business Administration 1977** A.B., University of Rajputana, India Dir., Bureau of M.A., University of Rajputana, India **Business and Economic** M.A., University of Texas, El Paso Research Ph.D., University of Missouri

Bernard A. Johnson (Assistant Professor) Business Administration 1974 B.S., Missouri Southern State College Dir., Small Business M.A., Central Missouri State University Institute

Jack D. Jolly (Assistant Professor) Mathematics 1968 B.S.E., University of Oklahoma M.A., University of Oklahoma Graduate Study, University of Texas, University of Wisconsin, University of Minnesota

J. Merrell Junkins (Professor) Psychology 1963 B.S., Pittsburg State University M.S., Pittsburg State University Ed.D., Oklahoma State University

Larry K. Karst (Assistant Professor) Counselor 1968 B.S., Pittsburg State University M.S., Kansas State Teachers College of Emporia

Nancy J. Karst (Instructor) **Dental Assisting 1975** B.S., Pittsburg State University

Harrison M. Kash (Assistant Professor) Chemistry 1958 B.S., Pittsburg State University M.S., Kansas State University

Sociology 1979 Raymond E. Kellner (Assistant Professor) M.S.W., Our Lady of the Lake University D.S.W., The Catholic University of America Nursing 1970 Retha L. Ketchum (Instructor) B.S.N., Creighton University M.S.E., Southwest Missouri State University Communications 1980 Patricia P. Kluthe (Instructor) A.B., Missouri Southern State College M.A., University of Minnesota English 1970 Joseph P. Lambert (Associate Professor) A.B., Mississippi College M.A., Mississippi College Ph.D., Auburn University Physical Education 1981 Kevin A. Lampe (Instructor) B.S., Western Illinois University Athletic Trainer M.S., University of Northern Iowa Education 1979 Michael L. Land (Associate Professor) A.B., Hardin-Simmons University M.Ed., Stephen F. Austin State University Ph.D., Texas A&M University Douglas B. Landrith (Assistant Professor) Physical Education 1959 Golf Coach B.S., Pittsburg State University M.S., Pittsburg State University **Business Administration 1966** L. Keith Larimore (Professor) B.S.B.A., Pittsburg State University M.B.A., University of Oklahoma Ph.D., University of Arkansas Student Services 1980 Kathy Jo Lay (Instructor) B.S.E., Missouri Southern State College Coordinator of Student Activities **Business Administration 1970** Charles E. Leitle (Professor) B.S.B.A., University of Arkansas M.B.A., University of Arkansas Ph.D., University of Arkansas

B.S.Ed., Northwest Missouri State University Women's Volleyball

Patsy K. Lipira (Instructor)

M.S., Kansas State University

Physical Education 1981

and Softball Coach

William R. Livingston (Assistant Profess B.S., Pittsburg State University	or) Mathematics	1968
M.S., University of Illinois Graduate Study of Illinois, Southern Mo University, University of Arkansas	ethodist University, Clemson	
Ray A. Malzahn (Professor) A.B., Gustavus Adolphus College M.S., University of North Dakota Ph.D., University of Maryland	Chemistry Dean, School of Arts & Sciences	1980
Terry D. Marion (Associate Professor) B.S., Southwest Missouri State University M.S., Pittsburg State University Ed.S., Pittsburg State University	Business Administration	1976
Robert P. Markman (Associate Professor B.S., Monmouth College M.A., University of Oklahoma Ph.D., University of Oklahoma	r) History	1967
Ann Margaret Marlowe (Associate Profe A.B., St. Francis College, Fort Wayne, In M.A., University of Dayton Ph.D., University of New Mexico	ssor) English ndiana	1971
J. Larry Martin (Professor) B.S., University of Tulsa M.S., University of Tulsa Ed.D., University of Georgia	Mathematics Head, Mathematics Dept.	1965
Richard W. Massa (Associate Professor) B.J., University of Missouri, Columbia M.A., University of Missouri, Columbia Graduate Study, University of Arkans	Communications Head, Communications Dept.	1972
James K. Maupin (Professor) B.S., Central Missouri State University M.S., Pittsburg State University	Dean,School of Technology	1955
Graduate study, University of Minnesota University of Oklahoma, University of	, Oklahoma State University, of Oregon	
Lyle F. Mays (Assistant Professor) B.S., Missouri Southern State College M.S., University of Washington	Computer Science	1981

Dental Hygiene 1982

Lezlie B. McCown (Instructor) B.S., Northeast Louisiana University

M.S., University of Missouri

Admissions 1980 Teresa A. McLean (Instructor) A.B., Pittsburg State University M.S., Pittsburg State University Allen H. Merriam (Associate Professor) Communications 1982 B.A., Drew University M.A., Ohio University Ph.D., Ohio University **Education 1980** Edward P. Merryman (Professor) A.B., Washington University Interim Dean, School of **Education and Psychology** B.S., Washington University M.E., Washington University Ph.D., Ball State University **Business Administration 1968** Robert I. Miller (Assistant Professor) B.S., Central Missouri State University M.A., Central Missouri State University Student Services 1966 Lorine V. Miner (Associate Professor) B.S., Pittsburg State University **Director of Career Planning** & Placement M.S., Pittsburg State University Reference Librarian 1971 Arlene E. Moore (Assistant Professor) A.B., Southwest Missouri State University M.A., Southwest Missouri State University M.L.S., University of Oklahoma Henry G. Morgan (Associate Professor) English 1971 A.B., University of Southern Mississippi M.A., University of Southern Mississippi Ph.D., University of Colorado Ronald J. Morgan (Instructor) Drafting & Design 1978 B.S.I.T., Pittsburg State University M.S., Pittsburg State University Melvyn W. Mosher (Associate Professor) Chemistry 1974 A.B., University of Washington **Assistant Director** of Regional Crime M.S., University of Idaho Laboratory Ph.D., University of Idaho Eugene C. Mouser (Associate Professor) Director of B.M.E., Oklahoma State University Academic Services 1970 M.S., Oklahoma State University Ed.D., Oklahoma State University

A.B., Missouri Valley College

Processing Librarian 1966

Gary R. Mulkey (Assistant Professor) B.S., Missouri Southern State College M.S., University of Arkansas Ph.D., University of Arkansas	Mathematics	1977
Robert H. Nickolaisen (Assistant Professor) B.S., California State University at Los Angeles M.S., Arizona State University Licensed Professional Engineer	Technology Assistant Dean of Technology	1980
Charles E. Nodler, Jr. (Instructor) A.B., Missouri Southern State College M.A., University of Texas at Arlington	Archivist	1978
Patricia F. Noirfalise (Instructor)	Dental Assisting	1975
Max D. Oldham (Associate Professor) B.S., Southwest Missouri State University M.S., Pittsburg State University Ed.D., Oklahoma State University	Physical Education Head, Physical Education Dept.	1973
Orty E. Orr (Professor) B.S., Pittsburg State University M.S., Oklahoma State University Ph.D., Oklahoma State University	Biology	1966
William H. Paapanen (Assistant Professor) A.B., University of Oklahoma M.Acct., University of Oklahoma CPA	Business Administration	1976
Roger Paige (Associate Professor) B.A., University of Missouri M.A., University of Missouri Ph.D., University of Missouri	Psychology	1976
MAJ Ronald J. Peterson (Assistant Professor) B.B.A., University of Texas at El Paso	Military Science	1980
Vernon L. Peterson (Assistant Professor) A.B., University of Omaha M.A., University of Iowa Ph.D., University of Iowa	Foreign Languages	1979
James N. Phillips (Assistant Professor) B.S., Austin Peay State University M.Ed., Utah State University	Physical Education 's Basketball Coach	1981

Russel A. Phillips (Professor)
B.S., Iowa State University
Ph.D., Iowa State University

Harry E. Preble (Professor)

A.B., University of Illinois

M.A., University of Illinois

Ph.D., University of Illinois

Vonnie R. Prentice (Associate Professor)
B.S.E., Northeastern Oklahoma State College
M.S., University of Arkansas
Ph.D., University of Arkansas

Cecil D. Ratliff (Assistant Professor)
B.S.E., Arkansas State University
M.A., George Peabody College for Teachers
Ed.D., Oklahoma State University

G. Erin Ray (Instructor) Education 1979
A.B., University of Northern Colorado
M.S., Southwest Missouri State University

Gail K. Renner (Assistant Professor)

B.S., Southwest Missouri State University
M.A., University of Missouri, Columbia
M.A., University of Missouri, Kansas City
Ph.D., University of Missouri, Columbia

Wendell C. Richards (Instructor)

B.S., Central Missouri State University

M.S., Central Missouri State University

Elmer E. Rodgers (Associate Professor)
A.B., Youngstown University
M.S.L.S., Western Reserve University

Mary G. Ross (Instructor)

B.S.N., Oklahoma Baptist University

M.S.N., Duke University

CPT. John R. Rousselot (Assistant Professor)
B.S.E., Southwest Missouri State University
M.S., Southwest Missouri State University

Arthur M. Saltzman (Assistant Professor)

A.B., University of Illinois

A.M., University of Illinois

Ph.D., University of Illinois

James V. Sandrin (Professor)  B.S., Southern Illinois University  M.S., Southern Illinois University  Ph.D., Southern Illinois University	on 1969
Paul H. Schwinghammer (Assistant Professor) B.S., In Accounting, Mankato State University B.S.Ed., University of Minnesota M.B.A., Mankato State University	ss 1982 on
B.S., Central Missouri State University M.S., Central Missouri State University Administration	nt :e
Joseph J. Shields (Associate Professor) B.S., St. Louis University M.A., University of Missouri Ph.D., Michigan State University	es 1979
Bobbie Z. Short (Assistant Professor)  B.S., Southwest Missouri State University  M.S., Pittsburg State University	
Dale W. Simpson (Instructor)  A.B., Harding College  M.A., North Texas State University  Ph.D., Candidate, North Texas State University	h 1979
F. Joe Sims (Professor)  B.M., Southwestern College, Winfield, Kansas  M.A., University of Northern Colorado  Ed.D., University of Oklahoma  Musi  Head, Dept. of Fine Art	c 1971 if s
Arlette W. Skeith (Assistant Professor) B.B.A., University of Mississippi M.B.A., University of Mississippi Ph.D. Candidate; University of Arkansas	n 1982
Marion E. Sloan (Assistant Professor) A.B., Pittsburg State University M.S., Pittsburg State University	s 1967
Robert E. Smith (Professor)  B.S., Northwest Missouri State College M.A., Oklahoma State University Ph.D., Oklahoma State University	y 1972

**Education 1968** Ross C. Snyder (Associate Professor) **Director of Educational Media** B.S., Taylor University M.A., Ball State University Law Enforcement 1975 lack G. Spurlin (Assistant Professor) Criminal Justice B.S., Northeast Missouri State University M.S., Central Missouri State University Administration Education and Psychology 1966 Sam J. Starkey (Associate Professor) B.S., University of Arkansas M.S., University of Arkansas Ed.D., University of Arkansas Political Science 1964 Annetta E. St. Clair (Assistant Professor) A.B., Pittsburg State University M.A., Pittsburg State University M.S., Pittsburg State University Biology 1969 Wayne E. Stebbins (Assistant Professor) B.S., Kansas State Teachers College of Emporia M.S., Kansas State Teachers College of Emporia **Education 1969** Bob F. Steere (Professor) B.S., Southwestern State University M.S., Northern Arizona University Ed.D., Utah State University Physics 1963 Arthur L. Strobel (Assistant Professor) B.S., Southeast Missouri State University M.S., University of Arkansas Mathematics 1970 Pudukkottai D. Subramanian (Professor) B.S., University of Delhi, India M.A., Miami University of Ohio Ph.D., University of Wisconsin Technology 1980 Dennis K. Sutton (Instructor) B.S., Pittsburg State University M.S., Pittsburg State University Sociology 1974 D. David Tate (Assistant Professor) B.S.E., University of Arkansas M.A., University of Houston Ph.D., Oklahoma State University

Robert R. Terry (Instructor)

B.S., Northeast Missouri State University

Law Enforcement 1974

Criminal Justice

Administration

Paul Teverow (Instructor)
B.A., Case Western Reserve University
M.A., Ohio State University

History 1982

Charles C. Thelen (Assistant Professor)
A.B., Occidental College
M.A., University of Northern Colorado
Ed.D., University of Northern Colorado

Music 1973

John W. Tiede (Associate Professor)
B.S., Southwest Missouri State University
M.B.A., University of Arkansas
J.D., University of Missouri

Business Administration 1968 Interim Dean, School of Business Administration

David L. Tillman (Assistant Professor)
B.S., Brigham Young University
M.S., Brigham Young University

Biology 1975

Warren F. Turner (Assistant Professor) B.S.E., Pittsburg State University M.S., Pittsburg State University Physical Education 1976 Head Baseball Coach and Assistant Football Coach

Joe D. Vermillion (Instructor) B.S., Missouri Southern State College M.S., Pittsburg State University

Academic Services 1980

George H. Volmert (Assistant Professor) B.S., Northeast Missouri State College M.A., Northeast Missouri State College

Registrar 1966

James T. Volskay (Associate Professor)
B.S.E., Southwest Missouri State University
M.E., University of Missouri
Ph.D., University of Missouri

Psychology 1969 Head, Psychology Dept.

Barbara A. Wales (Instructor)
A.B., Pittsburg State University
M.A., University of Missouri

Circulation Librarian 1977

Pamela K. Walker (Instructor) B.S., Missouri Southern State College M.S., Pittsburg State University Physical Education 1978

Doris A. Walters (Instructor)
B.S.E., Pittsburg State University
M.A., Pittsburg State University
Ph.D., University of Arkansas

English 1979

Lester Ward (Instructor)

A.A., Staten Island Community College B.S., Columbia University M.Ed., Central Michigan University Dental Hygiene 1982

Phillip R. Whittle (Professor)

B.S., University of Kentucky Ph.D., Iowa State University Chemistry 1970 Director of Regional Crime Laboratory

Robert C. Wiley (Professor)

B.S., Trinity University
M.Ed., Trinity University
Ed.D., Oklahoma State University

**Education 1969** 

Jimmie L. Williams (Assistant Professor)

B.S., Missouri Southern State College M.S., Central Missouri State University

Law Enforcement 1976 Criminal Justice Administration

Tillman D. Williams (Assistant Professor)

B.S., Southwest Missouri State University
M.S., Indiana University
Ph.D., Candidate, Indiana University

Physical Education 1977

Mathematics 1982

Carolyn J. Wolfe (Instructor)

B.S., Pittsburg State University M.S., Pittsburg State University

Edward W. Wuch (Associate Professor)

M.Ed., University of Missouri
M.Ed., University of Missouri
Ed.D., Candidate, Arizona State University

**Education 1969** 

Michael L. Yates (Assistant Professor)

A.B., Southern Illinois University M.E., Southern Illinois University J.D., University of Missouri Political Science 1980 Paralegal Studies

Donald R. Youst (Assistant Professor)

A.B., Kansas State Teachers College, Emporia M.S., Kansas State Teachers College, Emporia Ph.D., University of Nebraska Political Science 1971

#### **EMERITUS FACULTY**

Fred Cinotto (Professor)

B.S., Pittsburg State University M.S., Pittsburg State University

Administative Assistant 1965

Lloyd L. Dryer (Professor)

B.S., Oklahoma State University

M.A., Oklahoma State University
Ed.D., Oklahoma State University

Psychology 1950 College Psychologist

Harry C. Gockel (Professor)
A.B., Washington University
M.A., Washington University
M.S., University of Wisconsin

History and Geography 1938

Cleetis Headlee (Professor)
B.S., University of Missouri
M.A., University of Missouri

English 1946

Julie S. Hughes (Assistant Professor) B.S., Pittsburg State University M.A., Pittsburg State University

History 1963 Director of Alumni Affairs

Martha Ann McCormick (Professor) M.A., University of Chicago Ph.B., University of Chicago

Mathematics 1937

Grace C. Mitchell (Assistant Professor) A.B., Greensboro College M.A., Pennsylvania State University

English 1958

Dorothy A. Stone (Professor) B.S., University of Missouri M.A., University of Missouri **Business Administration 1939** 

#### PART-TIME FACULTY

Hazel R. Brietzke B.S., Auburn University

Theatre

James Brown
B.S., Missouri Southern State College
CPA

**Business Administration** 

**Judy Fowler** 

Art

William N. McDonald, Jr. B.S., University of Missouri

**Business Administration** 

#### AFFILIATED FACULTY

C.C. Young, M.D. Director-School of Radiologic Technology

# GENERAL INFORMATION

# THE COMMUNITY AND SERVICE AREA

Missouri Southern State College is situated in Southwest Missouri, eleven miles from the Kansas state line, 40 miles from the Arkansas border, and 15 miles from Oklahoma. In this southwest part of Missouri lies a nine-county area comprising approximately 250,000 people.

The campus, located at the northeast edge of Joplin on 350 acres of gently rolling land, is within commuting distance of a large college population. The college lies at the heart of a cluster of cities with populations up to 45,000. Some of these cities are Joplin (the largest), Carthage, Webb City, Carl Junction and Sarcoxie. The college is located in the hub of a four-state area with its network of east-west and north-south major highways and good air transportation schedules. Known in the early 1900's as an area of diversified agricultural activities and lead and zinc mining, it is even better known today as a rapidly growing industrial and service center. It is within easy driving distance of the Ozarks, one of the great recreational areas of the United States. Cultural activities, educational programs from kindergarten to college, and beautiful churches for all faiths are ideal for a college setting.

#### HISTORY

Missouri Southern State College originated in 1937 as Joplin Junior College. It was a part of the Joplin Public School System, but the first year of classes were conducted by the Extension Division of the University of Missouri.

The first year, classes were held in the Joplin Senior High School building. The college moved into its own building at Fourth Street and Byers Avenue on September 6, 1938. After 20 years in this location the college was transferred to 310 West Eighth Street where it continued to operate until June, 1967. The educational and administrative functions of Missouri Southern State College were moved to the new campus in June, 1967. Here the college is operating on a new, multiple building campus with an enlarged program and student body.

A series of new organizational and legal developments began in April, 1964.

On April 1, 1964, the voters created the Junior College District of Jasper County, naming a six-member Board of Trustees. This act ended the junior college's 27 years of existence as a part of the Joplin Public School System. The new junior college district included Jasper County and parts of three other counties—Newton, Lawrence and Barton. The institution was renamed Jasper County Junior College.

On July 22, 1965, the 73rd General Assembly of the Missouri Legislature passed House Bill No. 210 providing for the establishment of a two-year state senior college in Jasper County when the academic facilities of the Junior College District of Jasper County should become

available. Meanwhile, in anticipation of the passing of the House Bill No. 210, the Board of Trustees adopted the name Missouri Southern College in May, 1965.

The legislative act creating the state senior college provided for the administration of the junior and senior college through a governor-appointed Board of Regents. The appointments were made on October 13, 1965, the date that marks the beginning of the operation of Missouri Southern State College under the Board of Regents. The law directed the Board of Trustees to assume the responsibility of levying the necessary taxes within the Junior College District of Jasper County which together with state junior college aid and funds available from other sources, are sufficient to pay the costs of the junior college operation and the costs to date of capital improvements for both the junior and senior colleges. The state provided the operating cost of the senior college.

July 1, 1975, on the campus of Missouri Southern State College, the Governor of Missouri signed Senate Bill No. 114. This bill provided that from July 1, 1977, forth the State of Missouri will provide the funds necessary to provide the staff, cost of operation, and the payment of all capital improvements. Thus following approximately ten years of legislative effort by the citizens of Southwest Missouri, this college has taken its place with the family of higher education institutions in the State of Missouri.

## COLLEGE PHILOSOPHY AND PURPOSES

Missouri Southern State College is dedicated to the principle of developing a college community where all members are given the opportunity to learn, not only for the sake of learning, but for the purpose of revealing ways to live a better life.

Missouri Southern State College offers a diversity of study designed to satisfy a wide range of student and community interests. The college endeavors to maintain quality instruction at all levels.

Missouri Southern State College shares a responsibility with other state colleges to serve any eligible student in the State of Missouri who may apply for admission. In addition, the college also recognizes its responsibility and obligation to serve the citizens of the immediate community.

The college fulfills its obligation to both state and community by:

- a. Providing an opportunity for students to pursue a wide range of cultural and intellectual interests.
- b. Providing an opportunity for students to prepare for a wide range of established and emerging careers in industry, education, government, and business.
- c. Providing a variety of pre-professional and technical programs, at less than the bachelor's degree level.

#### GENERAL INFORMATION

- d. Providing a variety of continuing education opportunities for individuals at all levels of educational attainment.
- e. Providing an opportunity for students to prepare for a graduate education.

# STANDARDS FOR STUDENT CONDUCT

As active members of the college community, students at Missouri Southern State College have the rights and privileges enjoyed by members of all democratic communities. They also have the responsibilities and obligations which accompany these rights. Missouri Southern State College is guided by and observes the principle that there shall be no difference in the treatment of persons because of race, creed, color or national origin; and all members of the academic community are expected to support this principle.

Students have the responsibility of upholding the standards, traditions and policies of the college which has granted them membership in the academic community at their own request. They also have the responsibility of making maximum use of their abilities, of exercising good judgement, of observing the rights of others, and of adhering to

the requirements of adult society.

In addition, the following general policies are in effect:

1. Students have the obligation to obey all rules and regulations

and to preserve all property provided for their education.

2. Students are expected to conform to all federal, state and local laws. Gambling, alcoholic beverages, drugs, firearms, ammunition and explosives are specifically prohibited on college property. Students should be aware of the principles of libel and slander. Practice of these principles within the academic community could result in expulsion from the college.

The conduct of the individual student is an important indication of his character and of his future potential in life. Cheating, falsification

of documents and immoral conduct will not be tolerated.

4. Students are expected to conform to the usual accepted social

customs of the community.

5. Students shall not engage in or incite others to participate in obstructive or disruptive activities, deprive others of their rights, do harm to other individuals or property, or interfere with college or other

officials in the performance of their duties.

6. The Student Center of Missouri Southern State College and its facilities are dedicated to and for the primary use of the students, faculty, staff and their authorized guests. Individuals entertaining guests in the Student Center are responsibile for the proper identification, registration and conformance to the rules established for such guests. When not in use by campus organizations, off-campus groups may use the facilities of the Center.

7. The facilities of the Residence Halls at Missouri Southern State College are primarily for the use of the residents thereof and their invited guests. Disciplinary action will be taken against non-residents making unauthorized use of residence hall facilities.

8. The prevention of fire and safety of others is the responsibility of the individual. Students shall not set off false fire alarms, misuse fire equipment, or refuse to obey lawful directions by fire wardens.

The foregoing shall apply to all student conduct, and failure to observe these standards will constitute basis for disciplinary action, the maximum of which is dismissal from the College. Registration and participation as a student in Missouri Southern State College shall constitute full acceptance of these standards, as well as of all other rules and standards of conduct which have been or may be adopted.

## ACCREDITATION AND MEMBERSHIP

Missouri Southern State College is accredited by the North Central Association of Colleges and Secondary Schools, the National Council for Accreditation of Teacher Education, and by the Missouri State Department of Education.

Major memberships include the American Council on Education, the American Association of State Colleges and Universities, the American Association of Colleges for Teacher Education, and the North Central Association Sub-Committiee on Institutions for Teacher Education.

#### THE CAMPUS

Missouri Southern State College is located at the corner of Newman and Duquesne Roads near the northeast edge of Joplin. Eighteen new buildings and several remodeled older buildings serve the instructional and student acitivity needs.

**Spiva Library**, named in honor of the late George A. Spiva of Joplin, a friend and generous supporter of the College, provides an atmosphere which contributes to an intellectual climate. It includes the **Instructional Media Center**, as well as the **Library**.

**Hearnes Hall** is named after the Honorable Warren E. Hearnes, former Governor of Missouri. The building is the administration head-quarters and the reception center of the campus. It contains, also, instructional classrooms and faculty offices.

The L.R.Reynolds, Jr., Science and Mathematics Hall provides three large, elevated lecture rooms, regular classrooms, science laboratories and faculty offices. It is well equipped to meet the requirements of science and mathematics programs.

The Fine Arts Complex is a series of three buildings that serves the area of Art, Music, and Theatre. The Art Building includes a large exhibit hall that serves the Spiva Art Center of Joplin as well as the needs of the college. The Music Building includes a beautiful recital

### GENERAL INFORMATION

hall that was dedicated in honor of our past Vice President for Academic Affairs, Dr. Edward S. Phinney, the third building in this complex is the showplace of the campus, a 2,100 seat auditorium. This auditorium is used extensively by the community, by the theatre department, and by other agencies of the college.

The Robert Ellis Young Gymnasium houses the college basketball floor, classroom, faculty offices, and many facilities for physical

education classes.

The Leon C. Billingsly Student Center serves the total campus with a cafeteria, coffee shop, bookstore, lounge areas, Student Senate offices, six conference rooms, a deluxe dining area, Student Service offices, the Placement Office, the College Union Board office and two large ballrooms.

The Business Administration Building is a combination of the old Mansion House and the new building addition. It houses special-

ized and regular classrooms and faculty offices.

The Barn Theatre is a barn converted into an air-conditioned theatre with classrooms, dressing rooms, costume rooms, ticket booth

and fover.

**Kuhn Hall** is a new structure that provides facilities for the nursing education program and the student health center. This building is named after Dr. J.R. Kuhn, Jr., a strong supporter and leader of the nursing education program at Missouri Southern State College. The Student Health Center is located in Kuhn Hall. A full-time registered nurse is on duty and medical doctors from the community provide services at stated hours.

The Norval M. Matthews Hall is the newest addition to our campus. It provides facilities for the Industrial Arts, the Computer Science, and the Office Administration programs. Offices for each of these pro-

grams are located in this building.

The Technology Building provides facilities and faculty offices for Automotive Technology, Machine Technology, Drafting and De-

sign' Dental Hygiene and Dental Assisting.

The Mills Anderson Police Academy houses the Campus Security Office, offices for the director and faculty of the Law Enforcement Department, the R.O.T.C. Offices, classrooms and firing range and the office of the Dean of Technology.

Taylor Hall, the Education & Psychology Building, was occupied in November 1977. The building has eight classrooms, eight conference rooms, a psychology laboratory complex, a large lecture hall and of-

fices for both the education and psychology departments.

The Thomas E. Taylor Auditorium opened in the spring of 1975. The theatre seats approximately 2,100 people. Colored padded seats, an excellent acoustical system, and a fine light system characterize the theatre. A woodworking shop, a sewing room, a laundry, costume storage, dressing rooms, offices, a green room and four classrooms complete the finest theatre complex in the four state area.

Webster Hall is a residence hall that houses 200 men. It is an attractive and modern residence hall, completed in the Spring 1970.

South Hall was also completed in the Spring 1970, and will accommodate 110 women.

Women's Annex is two small buildings containing 16 private rooms in each. They are located north and west of the South Hall.

**New Residence Halls.** Five new residence halls were recently completed. Each building houses 32 students with four students in each living unit.

The Fred Hughes Stadium adds a new dimension to the campus. This complex seats approximately 7,500 fans. The field is one of the few Astro Turf athletic fields in the State of Missouri. This complex also features an all-weather artificial track.

**Phase II** of the Gymnasium was completed in the Fall of 1982. The building has nine faculty offices, an olympic size swimming pool, and four racquetball courts.



#### GENERAL INFORMATION

#### SCHEDULE OF FEES 1983-85

Students must pay fees at the regular time of registration each semester or have their registration automatically cancelled. Contractual agreements for unique hardship problems must be arranged with the Vice President for Business Affairs or his delegated representative prior to registration. Failure to meet the terms of the agreement automatically cancels the registration.

Appeals concerning special problems pertaining to fees or refunds should be directed to the Vice President for Business Affairs in Hearnes Hall 200.

These fees were assessed in the spring of 1983. THE COLLEGE RESERVES THE RIGHT TO CHANGE FEES WITHOUT NOTICE.

INCIDENTAL FEES	Each Fall & Spring Semester 8 Hours or Less Than		Summer Term
Residents of Missouri	<b>more</b> \$320	<b>8 Hours</b> \$29 per hr.	\$29 per hr.
Non-Residents (Out-of-State)	\$640	\$58 per hr.	\$58 per hr.

#### **OTHER FEES**

JITIER TEES		
Application for admission	\$10	
Applied Music	\$45	per credit hour
Art Materials		
Ceramic, sculpture	10	
Jewelry	5 5	
Change of class schedule	5	
Commencement	15	
Laboratory breakage and materials	cost	
Late registration (full-time)	10	
(part-time)	5	
National Teachers Examination	20	
(Required for BSE Major)-		
Radiologic Technology special fees		
First Term	100	
All other terms, each	40	
Student Activity	15	
Textbook rental and service charge		
(33% refundable):		
Spring and fall semester		
(over 8 hours)	45	
(under 8 hours)	9	per course
Summer Term	9	per course
Transcripts	_ 1	
RESIDENCE HALL COST (per Semester):	725	
Refundable Security Deposit	75	

Charges may be paid in full or in four installments per semester. If the installment plan is chosen a ten dollar (\$10.00) administrative charge will be assessed and the following schedule will be observed:

Fall Semester		Spring Semester	
August 1 September 15 October 15	\$245	January 1 February 15 March 15	\$245

(See detailed explanations below)

**Application for Admission:** A non-refundable application fee of \$10.00 is charged for processing applications for admission. The payment of this fee should be mailed with the application.

Applied Music: For one 30-minute lesson per week in applied

music, the usual fee is \$45.00 per credit hour.

**Art Materials:** This fee provides for materials such as clay, glazes, waxes, solder, and other similar items necessary for the course projects. Other materials are required to be purchased by students such as paper, brushes, water colors, or oils.

Change of Class Schedule: Students are charged \$5.00 for each class change made after classes begin (refer to College calendar). Students registered for 8 or more credit hours before and after the change in schedule will pay only the \$5.00 fee. Those changing from 7 or less hours to 8 or more hours must pay the full incidental and textbook fees and the \$5.00 change fee. Those who are registered for 8 or more hours and change to 7 or less hours during the change-of-registration week will receive a refund and will be charged by the credit hour.

**Commencement:** Candidates for the Associate or Baccalaureate degrees are charged a \$15.00 commencement fee. This covers the cost of the diploma, cap and gown, and other commencement activities. The fee is subject to refund only when the candidate fails to qualify

for graduation.

**Evening Session:** Students enrolled in evening classes for regular college credit courses, applicable toward an Associate or Baccalaureate Degree, are subject to the same fees, rules and regulations of the Day Session. Special fees are announced in the Evening Session Bulletin for classes not applicable to an Associate or Baccalaureate Degree.

Laboratory Breakage and Materials: There are no charges for the use of equipment in laboratories. The student will be expected to pay for excessive breakage or loss of equipment due to negligence on the part of the student. A fair actual value of the loss will be determined by school officials. Students will pay for materials used in individual projects. (Example: automotive parts.) Students enrolled in chemistry are required to purchase a \$10.00 laboratory breakage card which may be redeemed for this full amount at the end of the semester, providing there has been no breakage or loss on the part of the student.

Late Registration: A late registration fee of \$10 is charged fulltime students who register after classwork begins. Five dollars is

charged part-time students. This fee is not refundable.

**Miscellaneous Fees:** Occasionally a fee is charged for classroom materials, such as subscriptions to a periodical, line charges for bowling in physical education, film developing in photo-journalism, or purchase of paperback books in addition to the textbook rental.

Student Activity: This charge is to support activities of the student

Senate and the Campus Activities Board.

## GENERAL INFORMATION

Also available at the Business Office for a fee is an activity card for part-time students or for spouses of students. This card will allow admittance to most sports, theatre, and music events of the College.

Summer Session: Rules and regulations which govern admission to the first and second semester during the regular school year shall

also apply to the Summer Session.

Textbook Rental and Instructional Services: Students enrolled during a semester in eight or more credit hours pay a \$30.00 nonrefundable textbook rental fee (includes normal laboratory fees and cost of service on instructional equipment) and a \$15.00 textbook deposit. Students enrolled in less than eight credit hours during any semester pay a \$3.00 deposit and a \$6.00 rental for each course in which they are enrolled. The deposit is refunded when the student has returned all books, materials, and equipment in satisfactory condition. (Books may be purchased at the end of the term for full retail price less an allowance for rental charges paid by the student.)

**Transcripts.** Each student is entitled to two official transcripts without charge. There is a charge of \$1.00 for each additional copy.

Payment must accompany the request for each transcript.

# REFUND POLICY (Except for Residence Hall Charges)

Students enrolled in the fall and spring semesters who drop out of the College before the sixth week of the semester are entitled to a partial refund of refundable fees. Refunds for partial drops will be computed using the same percentages. The refund must be claimed during the term for which the refund applies. The refund will be computed as of the date the Registrar receives the withdrawal form completely and correctly executed.

The refund schedule is as follows: Within the first and second weeks		80 percent refund
From the third thru the fifth week		50 percent refund
After the fifth week		No refund
Refunds for the summer term are a	as follows:	
Within the first week		80 percent refund
From the second thru the third we	eks	50 percent refund
After the third week		

If the student has paid his college costs and there is a refund, these monies will be refunded directly to the student after all charges have been applied to his account. However, if the college costs have been paid partially or fully by financial aid (scholarship, grant or loan) or another source (i.e. Vocational Rehab), the refund will be returned to that financial aid or source up to 100% of the original aid amount. After resoring the financial aids or other source of its original amount, any excess of refund monies will be returned to the student.

## **GENERAL INFORMATION**

Students who feel that individual circumstances warrant exceptions from this policy may appeal in writing to the Vice President for Business Affairs. This appeal must be made during the term for which the refund applies.



# STUDENT SERVICES

G. Dolence, Carnahan, Miner, Karst, Hartley, Frazier, S. Beard, Lay

# Residence Life On Campus Residency Requirements

"All freshmen and sophomore men and women are required to live in the Missouri Southern State College Residence Halls to the extent available, unless they are married, live with their parents, live with a relative (by blood or by marriage), or are excused by the Dean of Students".

Residence facilities are available on campus for over 500 full-time students

at Missouri Southern State College.

Each room has twin beds, closets, desks and desk chairs. Coin operated laundry facilities are available in the Halls. Private telephones may be installed in each room with the occupants assuming responsibility for the installation charges plus the monthly telephone bill.

The residence halls are staffed by two full-time professional Head Resi-

dents and seventeen para-professional Staff Assistants.

An application and contract accompanied by a \$75 security deposit is required for reservation in a College Residence Hall. This is a combined contract for room and meals. The \$75 security deposit is forfeited if the contract is cancelled after June 30 for the fall term, or in case of new students, after November 30 for the spring term. The College retains the \$75 as a security deposit as long as the student is in residence and this deposit is not applicable to the housing account. The deposit will be refunded upon termination of the contract if all terms of the contract are fulfilled.

This contract is effective for the entire academic year (fall and spring semesters); or is effective for the remaining portion of the academic year when

entered into after the beginning of the fall term.

A student may request cancellation of the contract at the end of a term because of completion of graduation requirements or if an emergency beyond his control necessitates his withdrawal from school. If this request is filed with the Housing Director at least before the end of the term, and if approved, the deposit may be refunded unless there is a damage charge, outstanding account, or other violation of the contract. Students should refer to contract for detailed terms.

The College reserves all rights in connection with room assignments which are made in the order in which applications are received. Students' preferences are considered, but there can be no guarantee that assignments will be made

in accordance with the preferences.

The residence halls and food services are operated on a non-profit basis by the College, and the established rates are subject to change by action of the Board of Regents. Twenty meals are served each week.

Residence hall rooms may not be occupied by students earlier than 24 hours before they are required by the College to be in attendance. Students are

to vacate rooms when the term officially closes.

Reservations in residence halls are not held beyond 24 hours after the student is required to be on campus unless special arrangements have been

made with the Housing Director.

The College is not responsibile for the loss of, or damage to, any personal property of students. Parents should arrange for insurance coverage of personal property within the framework of their regular household policies.

# The Leon C. Billingsly Student Center

The Center continues to be the gathering point for leisure time, recreation, and realization. Not just commuter and resident students, but also faculty, staff, and the entire College community are served by the Center.

As the "living room" of MSSC, the Center provides services, programs, and conveniences the members of the College community need in their daily routine.

Located on the lower level are offices for the Student Center, Student Activities, Counseling, Campus Activities (College Union) Board, Student Senate, Crossroads, the College Bookstore, game area, and the Lion's Den (Snack Bar). The second level contains the Cafeteria, Lounge, Placement, Food Service, and Student Services Offices.

### Student Activities Office

Opportunities for participating in a wide variety of out-of-class activities are provided at Missouri Southern State College. Students are encouraged to investigate the wide choice of activities.

Various types of student activities permit different kinds of learning and exposure. Some activities primarily involve peer relationships; others involve

paraprofessional relationships within the college structure.

The Student Activities office assists students in the development of leadership characteristics and human relation skills through group activities. By encouraging group activities, the office of Student Activities emphasizes the development of responsibility on the part of the individual student.

Through student activities, a student becomes acquainted with issues which involve professional, political, financial, ethical, and moral concepts.

Specifically, students are involved in developing a life-style.

# Student Center (Campus Activities) Board

The CAB is a service organization comprised of students who plan social, educational, and recreation activities. The CAB is funded from student activity fees and has the responsibility of programming varied and interesting activities for all students.

The CAB Executive Board is comprised of eleven students and two advisors. Students who serve represent each of the 8 committiees which comprise the CAB. The committees are concerts, coffeehouses, mini-concerts, films, cultural events, dance, speakers, special events and trips.

Interested students may apply through the Office of Student Activities.

# **Counseling Center**

The Personal Counseling Center is located on the first floor of the Billingsly Student Center in the #117 office complex. The basic function of this office is to provide individual personal counseling, professional testing and assessment. The Personal Counseling Center effectively separates personal counseling from typical counseling/advisement functions.

The Center, in its functioning, seeks to assist students in their adjustment to the society in which they live. A full range of services is offered that may assist in this process. The center offers individual counseling for personal concerns, psychometrics to aid in identifying etiological difficulties and referral

services should they be required.

Confidential Counseling is, therefore, offered to students of M.S.S.C. in reconciling academic, vocational and personal decisions that are related to the relaization of their potentialities.

## Student Health Center

A Student Health Center is available and is staffed with a full-time registered nurse and the services of a physician are available upon call. This new facility was designed with the latest health techniques in mind.

#### STUDENT SERVICES

The out-patient clinic hours are from 8:00 a.m. to 4:00 p.m., Monday through Friday during the regular school year. No charge will be made for service during these hours but students are expected to pay for prescriptions, medications, diagnostic tests, ambulance service or minor surgery, except where covered by any insurance the student or his family may have. The College reserves the right to adjust benefits to the students within the limits of the funds made available for the health services through incidental fees paid by students.

### **Student Insurance**

A voluntary accident and sickness insurance plan for students in Missouri Southern State College is available. It is designed as a supplement to the health services already offered to all full-time students through the Health Center. This voluntary insurance program also covers emergencies and provides further protection while the student is away from the campus on weekends or on vacation, including the summer months.

## **Placement Services**

The Placement Office, usually associated with the task of matching people and jobs, offers an equally important service through career counseling, aiding students in clarifying their education and vocational objectives. An understanding on the part of the student of his interests, aptitudes, limitations, etc. and a knowledge of the world of work makes matching an individual's qualifications with a job much easier and certainly more gratifying to all parties concerned. Students are invited to use career counseling and placement services early in their pursuit of a formal education.

Although Missouri Southern State College is considered to maintain centralized placement services, the Placement Officer coordinates the functions of his office with other guidance and counseling services available to students on campus. The services more specifically related to finding employment are

centered in the Placement Office.

A collection of information folders supplied by major business establishments, industries, governmental agencies and educational institutions are made readily accessible in the Placement Office Library. A record of current information on job opportunities and announcements of on-campus interviews is either posted on bulletin boards or bound in notebook form for student use.

Students are invited to visit the Placement Office regularly.

Candidates for graduation must register with the Placement Office. Registration involves answers only to several basic questions. Since employers usually request credentials of a potential employee before making final judgment on their selection, most graduates will want to develop a set of credentials for the Placement Office files. The Placement Office personnel provide assistance in the development of credentials. Credentials are retained in the Placement Office files indefinitely and may be updated, declared inactive or activated only by the student upon written request.

Student Senate—The responsibility for student government rests not only with the student officers and student boards and committees but also with each member of the student body. The growth and development of Missouri Southern State College student government will be proportionate to the participation by the student.

The Student Senate serves as the governing body for students and acts as an intermediary between the faculty and student body. Members of the Student Senate gain experience in the functions of a student government and strive to promote the objectives of the Student Body Constitution.

40

The membership of the Student Senate consists of the Student Body Executive Officers, the officers from each class, and a number of senators representing each class. The student body executives officers for the summer cabinet for the following year are elected late each spring. The class officers and student senators are elected early each fall. Interested students petition and campaign for office.

# Intercollegiate Athletics

Missouri Southern State College is a member of the Central State Intercollegiate Conference. The conference includes intercollegiate competition for both men and women. To be eligible for participation, students must meet the requirements of the National Association of Intercollegiate Athletics, Association of Intercollegiate Athletics for Women; and Central State Intercollegiate Conference. The conference is composed of schools in Nebraska, Kansas, and Missouri. The college competes on the intercollegiate level in football, basketball, volleyball, softball, baseball, soccer, track, golf, and tennis.

## STUDENT ORGANIZATIONS

The College encourages student organizations which provide for the professional, social, academic, divisional, religious, political, or service interest of the students. New organizations may be established when approved by the Student Government and the College Administration.

# STUDENT GOVERNMENT

Student Senate Campus Activities Board

### HONOR groups

Alpha Psi Omega (Dramatics) Pi Omega Pi (Business Teachers) Psi Chi (Psychology)

# **DEPARTMENTAL GROUPS**

Beta Beta (Biology) Chi Epsilon Phi (Chemistry, Physics, Engineering) College Players (Theatre) Computer Science League English Club **Future Secretaries Association** Kappa Mu Epsilon (Math) Lambda Alpha Epsilon (Law Enforcement) Lambda Epsilon Chi (Pre-Law) Modern Language Club MSSC Chapter - American Dental Hygienists Association MSSC Engineers Club MSSC Student Art League MSSC Student Chapter of Council for Exceptional Children MSSC Student Nurses MSSEA (Missouri Southern Student Education Association)

Omicron Delta Epsilon (Economics)

Pershing Rifles (ROTC)
Pre-Professional Organization
for Medical Services
Students Achieving Greater Education
Sigma Tau Delta (English)
Society for the Advancement
of Management

# **RELIGIOUS ORGANIZATIONS**

Baptist Student Union Chi Alpha Fellowship of Christian Athletes Koinonia (Christian Campus Ministry) Newman Community (Catholic)

# GENERAL & SERVICE ORGANIZATIONS

Chess Club Cheerleaders College Republicans Crossroads (Yearbook) Residence Hall Association

## SOCIAL FRATERNITIES

Kappa Alpha (Delta Pi Chapter) Sigma Nu

### **SOCIAL SORORITIES**

Delta Gamma Lambda Beta Phi Zeta Tau Alpha MSSC Panhellenic Association

Mouser, DiNitto, M. Dolence, Freeman Gilbert, Humphrey, McLean, Vermillion

This division coordinates several mutually supporting areas: Admissions, Financial Aid, Advising and Testing, and Academic Development. Its goal is to provide access and support to students who are attending, or students who might attend our institution.

# Office of Academic Development

The academic development program is to provide an opportunity for marginally prepared students to earn a college degree. Working originally with recent high school graduates, the program will expand to include others who have not been a usual part of the college scene. Functions of the program include assisting with selection, scheduling, advising, tutoring, etc.

# Office of Non-Traditional Students

The returning adult learner to the college campus has, and will continue to be, a very viable part of higher education. Programs designed to meet the unique needs of these students are being developed. These programs include Orientation workshops, student organizations, and outreach programs, as well as the availability of individual conseling and advising services. Additional services will be made available as the needs of the returning students are identified.

# FINANCIAL AID

# **General Information**

Missouri Southern State College participates in a variety of programs for student assistance. These funds are from all levels: private, institutional, state, and federal sources which are coordinated to meet the individual student needs.

The Pell Grant is considered the "floor plan" of the federal assistance programs. All students applying for aid should file the American College Testing Program Data Entry System. When a student pays the appropriate fee, releases the information to all agencies, completes the enclosed institutional application, along with submitting a copy of the Federal Income Tax Return he is applying for the Pell Grant, Missouri Grant, and the campus based aid programs. There are various programs that are not based on financial need such as, Student Employment, Social Security, and Veterans Benefits. Scholarships are awarded to students who meet the appropriate criteria. All programs and awards are coordinated with the Pell Grant to meet the student's needs. It is the responsibility of the student to pursue the receipt of any money to be awarded. These funds are awarded without regard to race, creed, national origin, sex, color, or handicap.

#### Veterans

All courses listed in the Missouri Southern State College Catalog are approved for benefits administered through the Veterans Administration under Section 1775, Title 38, U.S. Code. Veterans or dependents wishing to apply for Veterans benefits should contact the Veteran Affairs Office for assistance.

# RESPONSIBILITY AS A FINANCIAL AID RECIPIENT

All students receiving financial aid at Missouri Southern State College must meet the criteria of that specific scholarship or award. In addition, all students must meet the academic progress policy as stated below. If you fail to meet these standards of academic progress, you will not be eligible to receive aid.

If you start the semester and received aid based on You must complete these hours and earn a minimum G.P.A.\*

12 or more hours 6 hours
9 - 11 hours 4 hours
6 - 8 hours 3 hours
Students carrying less than six (6) hours are not eligible for aid.

\*Student's cumulative grade point average (G.P.A.) is used to evaluate his progress. Progress toward a degree is computed on the following grade point average:

		semester		1.5
18	-33	semester	hours	1.6
34	-46	semester	hours	1.75
		semester		1.8
		semester		1.85
78	-93	semester	hours	1.9
94	-107	semester	hours	1.95
108	-and	above		2.0

The Financial Aids Office will notify all aid recipients who fall below the academic progress policy. If the student falls below the required G.P.A., he should contact the Director of Financial Aid who will review his file. After the review, the student will be notified of his status by the Director of Financial Aid. If the student desires to appeal, he will have opportunity to put in writing any special circumstances that the Financial Aid Committe should know in determining whether or not any aid should be awarded.

The Financial Aid Committee will review the student's records, along with any written comments submitted by the student, and notify the student if aid will be awarded for the following semester. If aid is offered, the student will be notified of any requirements to be met in order to remain eligible. If no aid is offered, the student will be notified of the steps to be taken before additional

aid can be considered.

### TYPES OF ASSISTANCE

ASSISTANCE	ELIGIBILITY
Pell Grant (Pell)	Need
Missouri Grant	Need
Supplemental Educational Opportunity Grants (SEOG)	Need
Nursing	Need

## WORK:

O III II	
College Work Study Program (CWSP)	Need
Student Help Employment (SH)	All Students

#### LOANS:

National Direct Student Loans (NDSL)	Need
Nursing Loans	Need
Guaranteed Student Loans (GSL)	Need
Installment Loan Program (ILP)	All Students

#### SCHOLARSHIPS:

Presidents - The scholarships are awarded to the first and second ranking students in each accredited high school in the college's service area. The scholarship is validated when the recipient enrolls as a beginning freshman at the

Regents — The scholarships are awarded to beginning freshmen who achieve a 23 or above composite score on the ACT test taken on one of the national

Jr. College Transfer — The scholarships are available to Junior College graduates, or students who have completed 55 hours or more from a Junior College, with a g.p.a. of 3.0 or above.

Performing Award —All students who have shown a demonstrated success

or high potential in a particular performance area.

Patrons — All students. Selection based on criteria established by donor, such as: male/female, geographic location, grade classification, college major, etc.

The following scholarships have been made available by interested individuals, service organizations, business firms, industries, and local civic organizations.

# PATRON SCHOLARSHIPS

TAIRON SCHOLANS		
Donors	Number of	Value of
	Scholarships	Each
American Association of		
University Women	1	\$400
Alpha Delta Kappa, Alpha Eta Chapter	1	\$100
Alpha Delta Kappa, Sigma Chapter Memorial	1	\$100
Alpha Delta Kappa, Upsilon Chapter	2	\$150
American Association of Medical		
Assistants, Jasper County Chapter	1	\$200
American Nurses Association, 5th District	1	\$100
Anonymous No. 1	5	\$200
Anonymous No. 2	1	\$250
Anonymous No. 3 - College Players	1	\$220
Anonymous No. 8	1	\$250
Bill Arkle Insurance Agency	1	\$200
Bank of Carthage	2 2	\$250
Russell Belden Memorial	2	\$500
Alberta Bennett Memorial	1	\$200
Thomas Hart Benton	2	\$500
Raymond F. & Freda E. Boehning Memorial	1 2 3 1	\$670
Dr. Fred S. Carney Memorial	1	\$200
Carthage Board of Realtors	1	\$150
Bob Chaplin Memorial	1	\$200
Bobbi Sue Clay Memorial	1	\$200
Francisco R. Colo'n Memorial	1	\$ 80
Commerce Bank of Joplin	1	\$250
Frank Croddy Memorial	1	\$100
Dickinson Foundation	5	\$400
Edna Drummond Memorial	11	\$640
Dr. Lloyd Dryer	1	\$200
Larry Dunham Memorial	1	\$200
Empire District Electric	10	\$640
Engineering-Math-Physical Science	2	\$350
First Community Bancorporation	5	\$500

Forty and Eight	1	\$100
Foster Insurance Agency	1	* \$200
Freeman Hospital Auxiliary Nursing Award	1	\$1590
Gateway Scholarship	1	\$ 50
Mr. & Mrs. Harry C. Gockel	1	\$200
Charles A. Green Memorial	1	\$100
Joe Harding Supply Company	1	\$200
Harlan-Mosler Memorial	1	\$100
Harrison G. Harper Memorial	3	\$600
Marjorie Heckert Memorial Hercules Incorporated	1	\$100
Mrs. Dorothea Hoover Memorial	2	\$250
Henry Hornsby Memorial	4	\$200
Mr. and Mrs. Fred G. Hughes	2	\$300
C.C.Ivie Memorial	2	\$300
Jasper County Medical Society	1	\$100
Jasper County Medical Society Auxiliary	2 2 2 4	\$670
Mr. & Mrs. Alton Jones	2	\$300
Joplin Area Association of Retarded Citizens	4	\$500
Joplin Business & Professional Women's Club		\$250
Joplin Centennial Scholarship	2 1 1	\$270
Joplin Exchange Club	1	\$530 \$100
Joplin Kiwanis Club	3	\$300
Joplin Rangeline Lions Club	2	\$335
Joplin Rotary Club	5	\$290
Joplin Tri-State Chapter-National	3	\$2.70
Association of Accountants	1	\$200
Joplin Truck Sales, Inc.	1	\$250
The Kassab Music Award	1	\$570
KOAM-TV	1	\$300
KODE-TV	1	\$400
Dr. J.R.Kuhn, Jr.	2	\$200
Arthur Kungle, Sr.	5	\$640
Harry H. Landreth Memorial	1	\$570
Jack F. McCracken Memorial	1	\$300
Merchants & Miners Bank - Webb City	1	\$200
Mid-Western Machinery Company	3	\$220
MSSC Alumni Scholarship	5	\$300
MSSC Math & Science Award	1	\$300
MSSC's Small Business Institute	3	\$100
MSSC Women's Club	1	\$610
Samuel L. Murto Memorial	1	\$225
Myers, Baker, Rife & Denham	1	\$250
Carol Newton Memorial	1	\$670
Florence Nightengale	1	\$570
Ralph Nolan Memorial	1	\$200
Overall Achievement Award Ozark Chapter-Professional Secretaries	1	\$400
International	4	#400
Mr. & Mrs. B.L. Parker	1	\$100
Edward S. Phinney Memorial	1 1	\$250
Pilot Club of Joplin	1	\$450
Tricia Nicole Rainey Memorial	2	\$250
Anna Marie Redden Memorial	1	\$500
Rho Eta No.185 of ESA Women Intern.	1	\$230
Frances Richardson Memorial	1	\$100 \$ 50
Robertson & Robertson	1	\$300
		4500

7th District Mo Federation of Women's	
Club 1	\$300
Dr. George Schaefer-FAG Bearings, Inc.	\$670
William H. Sisk Memorial	\$200
Society of Manufacturing Engineers 2	\$250
Society of Manufacturing Engineers 2 Soroptimist Club of Carthage 1	\$580
Soroptimist International Club of Joplin	\$580
Southern Missouri Distributors, Inc.	\$200
Southern Missouri Distributors, Inc. 2 Southwest Missouri Bank of Carthage 1	\$300
George A. Spiva Memorial	\$500
Harry Spradling Memorial	\$200
St. John's Medical Center Auxiliary 1	\$490
Dan L. Stanley Memorial	\$200
Vera Steininger Memorial	\$540
Dorothy Stephenson Memorial 5	\$240
Student National Education Association 1	\$400
Thomas E. Taylor Memorial	\$100
Teledyne Neosho	\$900
Dr. A. Paul Thompson Memorial	\$670
Tri-State Interior Systems, Inc.	\$220
United Missouri Bank of Carthage	\$500
United Missouri Bank of Joplin 1	\$300
Nicole Marie Vore Scholarship	\$400
Art Wadkins Scholarship 6	\$580
Agnes L. Warnert Memorial	\$300
	\$500
Dennis Weaver 2 Webb City-Carl Junction Rotary 1	\$200
Christine Webster Memorial	\$100
Western Jasper County Medical Health	
Association 2	\$200
Dr. & Mrs. John Windle	\$300
Erma H. Whitaker Memorial	\$200

#### HOW TO APPLY FOR FINANCIAL AID

- 1. All students should complete and submit the American College Testing Program Family Financial Statement to the ACT Operations Center in Iowa City. Designate Missouri Southern State College (code 2304) to receive a copy of this report. The Family Financial Statement will generate a Pell Grant, Missouri Grant, and a comprehensive financial aid report.
- Applicants should bring or mail all three copies of the Pell Grant Student Aid Report to the Financial Aid Office as soon as they receive the document.
- 3. Applicants should bring or mail a signed copy of their and/or their parent's 1040 Income Tax Form to Missouri Southern State College. The document (s) must be on file before any money will be dispursed to the student.
- 4. If the student is applying for work, loans, or other grants, they should complete the institutional application which is enclosed in the Family Financial Statement and return it directly to the Financial Aid Office. As soon as the necessary documents are on file, an award will be made to the student.
- 5. Applicants for scholarships should complete the application enclosed in the ACT packet and return it to the Financial Aid office prior to April 1.
- Transfer students applying for financial aid must obtain and submit a transcript of financial aid for each college previously attended.
- Applicants for special programs should contact the Financial Aid Office directly so as to receive proper instructions.

8. Applicants for financial aid must have completed the appropriate application well in advance of each semester's registration and have them on file in the Financial Aid Office so a financial aid package can be completed.

For further information regarding financial aid, contact:

Office of Financial Aid Missouri Southern State College Newman & Duquesne Roads Joplin, Missouri 64801 (417) 624-8100

# SPECIAL AWARDS AND PROGRAMS

### SPECIAL AWARDS

**Edward S. Phinney Memorial Scholarships:** This memorial scholarship has been established to honor the late Dr. Edward S. Phinney, Vice President for Academic Affairs. Dr. Phinney was Dean of the College from 1967 to 1973. The scholarship will be given each year to a student who has achieved academic excellence while attending Missouri Southern State College.

**Ena C. Drummond Memorial Scholarship:** The intent of this scholarship is to give appropriate recognition for academic excellence and for the purpose of assisting students in the science department. The number of scholarships awarded each year varies. Miss Drummond was a former instructor of Joplin Junior College from 1938 to 1955.

**Spencer F. Bartlett Respect Award:** The intent of this award is to give special recognition to a graduating male and female student who has the greatest respect for God, U.S. of America, and has maintained average grades or better while attending Missouri Southern State College. The amount of the award varies each year.

### INSTALLMENT LOAN PROGRAM

The following organizations have contributed funds to the Missouri Southern State College Installment Loan Program. Much of these funds have been alloted to the Missouri Southern Emergency Loan Fund.

- \* David Pearl B' nai B' rith Loan Fund
- \* Michael Loan Fund
- \* Joplin Business and Professional Women's Club Loan Fund
- \* Arnold E. Irwin Loan Fund
- \* Patricia Smith Memorial Loan Fund
- \* Pauline M. Graham Loan Fund
- \* Edna F. Gaither Memorial Fund
- \* Joplin Life Member Club Telephone Pioneers Loan Fund
- \* Joplin Rangeline Lions Club Emergency Loan Fund
- \* Dan Howard Memorial Fund

#### SPECIAL PROGRAMS

ROTC Scholarship Bureau of Indian Affairs (BIA) Social Security Vocational Rehabilitation Veteran Administration Benefits

## **Academic Advising Center**

The Academic Advising Center is located in the Academic Services complex on the first floor of Hearnes Hall. Most services are available to area students without cost.

Assistance is offered the student in dealing with academic and vocational decisions which may help the student to realize his or her potential. A library of graduate catalogs is available. Vocational, interest, and aptitude tests are available without charge to the students of the college.

Information and/or registration forms are available for many national tests. (i.e. Graduate Record Examination (GRE), Medical College Admission Test

(MCAT), Graduate Management Admission Test (GMAT).

The Center serves as a test center for several testing programs including the American College Test (ACT), College Level Examination Program (CLEP), the General Educational Development Test (ED), Dental Hygiene Aptitude Test (DHAT), Entrance Examination for Schools of Nursing (EESN), etc. Information and registration materials are available from the Center.



# ADMISSION AND EVALUATION OF TRANSFER CREDITS

# 1. Admission Direct from High School

A. Residents of Missouri. Any resident of Missouri who, (a), is a graduate of an accredited high school, (b) has participated in the American College Testing Program, (c) pays a \$10 non-refundable application fee, is eligible for admission to Missouri Southern State College.

Non-Residents of Missouri. A non-resident of Missouri in order to be eligible for admission to study as a first time freshman, (a) must be a graduate of a high school accredited by the Regional Association or by an appropriate accrediting agency of his home state, (b) must have participated in the American College Testing Program, (c) have a composite score of 15 on the American College Test, or must rank scholastically among the upper two-thirds of the members of his graduating class, (d) must pay a \$10 non-refundable application fee.

# 2. Admission as a Transfer Student.

Students transferring from another collegiate institution, (a) must have official transcripts sent to the Director of Admissions by the Registrar from each institution attended, (b) must be eligible to return to their last institution, and (c) must pay a \$10 non-refundable application fee. Students seeking admission from other colleges with 55 transfer credit hours or more, must present a minimum C (2.0 on A = 4) average.

Transfer students must also take the senior year or 30 out of the final 36 hours in residence at Missouri Southern State College.

## 3. Special Admission

There are two types of students who are admitted to the College who do

not possess the regular admission requirements:

**Temporary.** In some instances, students may desire to enroll for a limited amount of credit without submitting transcripts of previous academic work. This may be done with the following contingencies:

- No more than 15 semester hours of credit may be earned in this manner.
- Credits earned while enrolled as a temporary student may not be counted toward a degree or certificate unless the student changes his status.
- c. Work beyond 15 semester hours will not be permitted until such time as all credentials are filed for regular admission.

**Special.** A Missouri resident, 21 years of age or over, who has not graduated from high school who has ACT test scores on file at the college may be admitted on a probational basis. A student admitted under this regulation must make a "C" average over his first semester's work to be eligible to return for the second semester. Upon successful completion of 30 semester hours, a student's status will change from "special" to "regular."

### 4. International Students.

Students not citizens of the United States, who wish to apply for admission, should write the Director of Admissions, Missouri Southern State College, for the proper application forms and instructions. Three basic concerns apply to international student applications: (1) Academic competency; (2) Ability to read and speak the English Language adequately for college level study; and (3) Ability to finance the cost of education at Missouri Southern State College. All applicants from non-English speaking countries must pass the Test of English as a Foreign Language.

## 5. Credentials Required for Admission

Students with no college experience are required to furnish credentials as follows for admission to the freshman class:

- A. High School Transcript. An official transcript of high school credits showing that he has met requirements for graduation.
- B. Application. The application for admission must be completed one week before the first day of registration (see college calendar).

This includes all credentials required by the admissions office.

- C. Application Fee. A fee of \$10 with the application for admission. (This fee is non-refundable and non-applicable to other college fees.)
- D. Missouri Southern State College will require additional credentials from students whose application credentials raise questions about their acceptability into the student body. While the college makes every effort to give each applicant an opportunity for a college education, it reserves the right to deny admission when the College's ability to meet the need of the student and/or the welfare of the student body are in question.
- E. Students who do not attend Missouri Southern State College within one year after making application, must submit new credentials when seeking admission again.
- Admission to Missouri Southern State College does not automatically confer admission to the nursing program, radiologic technology, dental hygiene, etc. In addition to meeting the admission requirements for the College, candidates who are interested in these health career programs are required to apply for admission to the department. Application froms may be obtained from the Department of Nursing Office, Kuhn Hall, the Radiology Department of St. John's Medical Center or the Dental Hygiene Department Office. Applications should be sub-

mitted prior to March 1, preceding the Fall Semester during which you wish to enter. Each application is reviewed by the Admission Committee of the respective department. See nursing department page 150, dental hygiene department page 100, or radiologic technology under affiliated programs for full information on admission and acceptance criteria.

G. Veterans who plan to attend under the G.I. Bill of Rights or Veteran's Orphans Act must present a certificate of eligibility at the time of registration.

Students transferring from other colleges must present the regular credentials listed above for freshman plus official college transcripts and statements of honorable dismissal from each institution attended after high school graduation.

Former Missouri Southern State College, Junior College of Jasper County, and Joplin Junior College students must inform the Office of Admissions of their intention to return. When necessary, these students will be required to update their credentials.

### 6. Placement Tests.

Missouri Southern State College participates in the American College Testing Program. Scores from this test battery must be presented, within three years from the time the test was taken, as an admission credential. These tests are administered at Nationally approved test centers five times a year. Missouri Southern State College is a test center.

### 7. Resident Credits from Institutions of Equal Standing with Missouri Southern State College.

Credits transferred from accredited colleges will be given full value in similar courses whenever possible. The amount of credit given for courses studied in other institutions may not exceed the amount given at Missouri Southern for the same length of time of instruction. Students

may not transfer credits to satisfy more than one-half the major course requirements for a department unless he has the approval of the Vice President for Academic Affairs.

# 8. Transfer of Resident Credits from a Junior College.

Credits will be accepted by transfer from a junior college to meet lower division requirements only. This means that students will not receive credit by transfer from a junior college for more than 64 hours. A minimum of 60 semester hours must be earned in a senior college. Upper division courses carrying a grade of D will not be accepted for credit at Missouri Southern State College. Transfer students must also take the senior year or 30 of the final 36 hours in residence at Missouri Southern State College.

# 9. Advanced Standing Examination.

A student whose travel, employment, extensive readings or other unique educational experiences appear to have given him proficiency in a course required in his curriculum equivalent to that ordinarily attained by those taking the course in regular class, may be granted permission to take an advanced standing examination. This examination may be a subject matter test of the College Level Examination Program (CLEP) or a comprehensive test designed by the department to cover the subject more fully than a regular final examination. In addition to having the above qualifications, a student in order to receive credit for an advanced examination must:

- A. Be enrolled in college at the time of the examination;
- B. Not have taken an examination over the course within the preceding six months;
- C. Not have credit in a more advanced course in the same field;
- D. Be working toward a degree at Missouri Southern State College;

E. Have the approval of the head of the department in which the course is offered.

After a student has taken a departmental examination, the professor will transmit the grade to the Vice President for Academic Affairs Office. If performance is equated as a "C" grade, the Registrar will record the credit.

Students may initiate an examination in the CLEP Program by contacting the Director of Testing and Guidance. A student may initiate a departmental test with the head of the department.

After the student has taken the CLEP Examination, the test will be graded in Princeton, New Jersey. Scores will be sent to both the Vice President for Academic Affairs and the student. If performance is equated as a "C" grade, the Registrar will record the credit

Missouri Southern State College participates in the CLEP General Examination Program. Entering freshmen who have delayed college entrance by as many as three years since high school graduation may take the CLEP General Examination.

Three to six hours may be awarded in each of the five test areas. Credit will be granted only if the score is 500 or above on the mathematics, humanities, natural sciences, and social sciences and history. A score of 610 will be required on the English examination.

### 10. Validation Examinations.

A student who has earned credit in a course which Missouri Southern State College refuses to accept because of the method in which the course was taken, or because the institution at which the course was taken was not accredited, may apply for a validation examination. In order to qualify for a validation examination a student must:

A. Be enrolled in college at the time he takes the examination;

- B. Present the necessary evidence to prove that he has taken the course:
- C. Get approval from the Registrar, the School Dean and the Head of the Department in which the course is offered to take the examination:
- D. To initiate the proceedings within the first eight weeks after entering college.

The student initiates his request for examination at the Registrar's Office. The School Dean and the Department Head will appoint a professor to construct, administer, and evaluate the examination. The result is reported to the Registrar who records the grade if it is "C" or above.

### GENERAL REQUIREMENTS FOR GRADUATION

11. Catalog Used as a Basis for Degree Requirements. A candidate for a degree may use as a basis for degree requirements the general catalog issued for any year following the date of his first registration in the college, so long as it is not more than five years prior to the date the degree is to be conferred. The candidate must have been in residence during the year of the catalog selected. The degree requirements in this catalog, 1983-85, became effective June 1, 1983.

12. Degrees. Major	ВА	BS	BSBA	BSED	*BGS	Other
Accounting			X			Associate
Art	X			X		
Automotive Technology	, ,					Associate
		X		X		
Biology Communications	X					
General Business	^		X	x		Associate
	x	X	~	X		
Chemistry	^	X		~		Associate
Computer Science		x				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Criminal Justice Administration		^				Certificate
Data Processing						Certificate
Dental Assisting						Associate
Dental Hygiene						Associate
Drafting & Design			**			Associate
Economics & Finance			X	**		
Elementary Education				X		
English	X			X		
<b>Environmental Health</b>		X				Associate
History	X					
Industrial Arts Education				X		
Law Enforcement						Associate
Machine Technology						Associate
Management Technology		X				
Marketing & Management			X			
Mathematics		X		X		
Medical Technology		X				
Music	X			X		
Nursing						Associate
Office Administration						Associate
Physical Education				X		

Physical Science			X	
Physics		X	X	
Political Science	х		~	
Pre-Agriculture				Associate
Pre-Dentistry				Associate
Pre-Engineering				
Pre-Journalism				Associate
Pre-Medicine				Associate
Pre-Optometry				Associate
Pre-Pharmacy				Associate
Psychology	x	X		Associate
Psychology-Special Education	^	^	v	
Radiologic Technology			X	
Secretarial Science				Associate
Social Science				Certificate
Sociology		**	Х	
Spanish	X	X		
•	X		X	
Speech & Theatre	X		X	
Speech	X			
Theatre	X			

\*This program is designed for the student who finds that the present degree program (Majors) at the College will not enable him—her to obtain desired educational objectives. The program may or may not prepare a student for a particular occupation or entry into a professional school. Students should see the Registrar for full particulars on the program.

# 13. Baccalaureate Degrees.

- A. Residence—The student must have earned thirty out of the final thirty-six semester hours in residence at Missouri Southern State College. (This regulation dose not apply to three-one affiliation programs.)
- **B.** Credit Hours—At least one hundred twenty-four semester hours of college credit applicable to a baccalaureate degree are required to qualify for graduation.
- C. Grade Point Average—The grade point average for the courses required for the major must be at least 2.0 as must the grade point average for all courses taken in the major discipline.
- D. Upper-Division Hours—A minimum of forty semester hours in upper division courses (those with numbers in the 300's and 400's) must be presented to meet the graduation requirements. Reasonable adjustments are made for three-one affiliation programs.

- E. Foreign Language—All students expecting to graduate with a Bachelor of Arts degree must successfully complete 10 hours of the same foreign language as a part of his or her graduation requirements.
- F. Special Education—All students expecting to graduate with a Bachelor of Science Education degree must successfully complete 2 hours of Special Education (Educ 302) as a part of his or her graduation requirement.
- G. Time of Graduation—A student may complete graduation requirements at the close of any semester. Formal announcement of graduation is made and degrees are conferred at the close of the spring semester. All students completing graduation requirements since the preceding commencement are expected to participate in the commencement activities.

- H. Major Field—The grade point average for the courses required for the major must be at least 2.0 as must the grade point average for all courses taken in the major discipline.
- PlacementServices—Each degree candidate must register in the Placement Office.
- J. Degree Candidacy Application—Each student must make application for degree candidacy when pre-registering for his final semester in the school year in which he is to receive his degree. The application form is available in the office of the Registrar.
- K. Educational Methods Course—These courses, including student teaching, are applicable only to the Bachelor of Science in Education degree.
- L. Correspondence and Extension Credit—A maximum of twelve semester hours of correspondence and extension credit may be considered for admission to the degree.
- M. General Education Requirements—Missouri Southern State College has a program of Gen-

eral Education that contributes toward the development of the whole person, as an individual and as a member of society.

To accomplish this goal the student pursues a carefully planned and correlated program of courses. The courses selected to fulfill the General Education requirements:

- (1) improve skills of communication and mathematical proficiency;
- (2) give an understanding of leading intellectual ideas of western civilization;
- (3) create an appreciation of our cultural and political heritage;
- (4) emphasize responsibility as a citizen;
- aid in the development of creative and independent thought and expression;
- (6) provide knowledge and understanding of the physical universe;
- (7) develop awareness of the importance of health and physical fitness: and
- (8) afford experiences conducive to the development of strong character and personality.

## BACCALAUREATE DEGREE

Area 1.	Basic Requirements	Credit Hours Required
Α.	English Composition (Eng. 101 and 102 or 103	6)
	(or achievement of the required competency	
	level which can be done in 3 hours (Eng. 111)	
	or as many as 11 hours (Eng. 100, 101, 102)	
В.	Communication (Select one)	
	100 Oral Communications	(3)
		(3)
	JUJ Business & Horessional Specell	(3)
C.	Mathematics (110 or above)	3
D.	Physical Education:	4
	HPER 101 Intro to P.E.	(2)
	HPER 160 Personal Health	(2)
	Total for Area	1. 16 hours

		Consolit III
Area 2.	Humanities and Fine Arts	Credit Hours Required
	Literature (at any level for which the	Require
	student is qualified, except Eng. 325)	3
	Select two courses (not in same	
	area of study.)	
		6
	15	
	Literature (3) Music (3)	
	Philosphy (3)	
	*May be counted as one course only if the student	
	had more than one course in the same Foreign Language.	
	Ten hours of one foreign language is required of all students graduating with the Bachelor of Arts	
	Degree. See page 55.	
	The Bachelor of Arts degree students, who must	
	take foreign language as a degree requirement,	
	may apply three hours of foreign language taken	
	beyond the degree requirement toward the	
	humanities and fine arts general education	
	requirements.	
	Total for Area 2.	9 hours
		Credit Hours
Area 3.	Natural Science	Required
	Biology	4
	Physical Science	5
	Total for Area 3.	9 hours
		Credit Hours
Area 4.	Behavioral and Social Sciences	Required
	History 110 or 120 (U.S.History)	3
	PSc 120 Gov't: Nat'l, State, Local	3
	Econ 180 (or any other Economics Course	3
	for which the student might qualify)	3
	Select One:	3
	Psychology (3)	3
	Sociology (3)	
	Economics (3)	
	History (3)	
	Political Science (3)	
	Geography (3)	
	Total for Area 4.	12 hours
	Total General Education Requirements	46 hours
14. As	ssociate of Arts Degree.	
		nt Average—
		ulative and ma-

- Credit Hours—A minimum sixty-two semester hours must be completed.
- B. Residence—The last fifteen semester hours must be completed in residence at Missouri Southern State College.
- C. Grade Point Average— Minimum cumulative and major field grade point average must be 2.0
- D. Major Field—The student must meet the course requirements of the particular pre-

professional program he selects. Or, the degree may consist of the general education courses plus additional hours adding up to 62, as approved by the adviser and the Vice President for Academic Affairs.

E. General Education Requirements—The degree requires completion of the general education requirements which are:

1	Basic Skills	Credit Hours Required
Area I.	English 101-102 or 103, English Comp	6
	Select One:	3
	Speech 100, Oral Communications (3)	3
	Speech 131, Voice & Articulation (3)	
	Mathematics (110 or above)	3
	Physical Education	
	Select One:	2
	HPER 101, Intro to PE (2)	
	HPER 160, Personal Health (2)	14 Hours
	Total for Area 1.	14 nours
		Credit Hours
Area 2.	Behavioral & Social Sciences	Required
	History 110 or 120, History of United States	3
	Select two:	6
	Political Science 120, Government: National	
	State, Local (3) History (3)	
	History (3) Geography (3)	
	Psychology (3)	
	Sociology (3)	
	Economics (3)	
	Total for Area 2.	9 hours
		Credit Hours
Area 3.	Humanities and Fine Arts	Required
	Any 3 hours of literature courses for which the	
	student is qualified except Eng. 325.	3
	Select One:	3
	Music 110, Music Appreciation (3)	
	Art 110, Introduction to Art (3) Theatre 110, Theatre Appreciation (3)	
	Philosophy 201, Introduction to Philosophy (3)	
	Total for Area 3.	6 hours
		Credit Hours
Area 4	Natural Sciences	Required
	Any biological or physical science	4
	Total for Area 4	4 hours
	Total general education credit required—33.	

- 15. Associate of Science Degree.
- A. Credit Hours—A minimum of sixty-two semester hours must be completed.
- B. Residence—The last fifteen semester hours must be completed in residence at Missouri Southern State College.
- C. Grade Point Average—The minimum cumulative and major field grade point average must be 2.0
- D. Major Field—The student must meet the course requirements in the particular program of study he selects as approved by his adviser.
- E. General Education Requirements—The degree requires completion of the general education courses as well as those outlined in his major field of study. The general education required courses are:

Area 1.	Basic Requirements English 101, English Composition Mathematics (30 or above) Speech Physical Education	Credit Hours Required 3 3 3
	Select One: HPER 101, Intro to PE (2) HPER 160, Personal Health (2)	2
	Total for Area 1.	11 Hours
Area 2.	Social Science	Credit Hours Required
	Select One: History 110 or 120, History of the U.S. (3) Political Science 120, Government:	3
	National, State, Local (3) Select One:	3
	Sociology (3) Psychology (3) Total for Area 2	6 Hours
	Total for Area 2	6 Hours
Area 3.	Humanities and Fine Arts Select One: Theatre 110, Theatre Appreciation (3) Philosophy 201, Introduction to Philosophy (3) Music 110, Music Appreciation (3) Art 110, Introduction to Art (3) Literature, except Eng. 325 (3)	Credit Hours Required 3
	Total for Area 3.	3 hours
Area 4.	Natural Sciences Select One: Biology 100, General Biology (4) Physics (5) Chemistry (5) Geology (5)	Credit Hours Required 4
	Total for Area 4	4 hours
	Total general education credits required—24.	

# 16. Physical Education Requirements.

All students are required to satisfactorily complete 4 hours of physical education before they are permitted to graduate. Currently students must complete HPER 160, Personal Health, and HPER 101. HPER 101 is a two-credit hour course consisting of two hours of laboratory per week and one hour of lecture per week. Credit can be given only if both laboratory and lecture are completed.

Students should take these courses during the freshman and sophomore years. Students who meet the following conditions may be exempt from all or part of this requirement.

A. Students who transfer from colleges where physical education is not taught will be exempt from the requirements as follows: (1) Students transferring less than 15 semester hours will not be exempt from any of the requirements; (2) Students transfering 15 to 29 semester hours will be exempt from 2 hours of physical education; (3) Students transferring 30 hours or more will be exempt from the 4 hours of physical education.

B. Upon presentation of proper documentation to the Registrar, a veteran may petition for exemption from physical education.

# 17. State Legislation Requirement.

Sections 10373, 10374, 10374a, 10374b, 10374c (S.C.S. for S.B.4) of the Laws of Missouri, 1947 (6th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American Institutions."

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to senior college work, or (2) by certification of the completion of such requirements in another collegiate institution.

All students who have completed the General Education Requirements meet the requirements of Missouri law. Out of state students who do not complete their general education at Missouri Southern must pass a special examination on the Missouri Constitution.

School laws of Missouri 1974, requires that persons connot be granted a certificate or license to teach in the public schools of Missouri unless he or she has satisfacorily completed a course of two or more semester hours in the psychology or education of the exceptional child. This requirement can be met by taking the course, Psy. 302.

# 18. All Work Must Be Completed.

Degrees are conferred only at scheduled commencement exercises. If a student completes requirements for a degree after a commencement date, his degree will be granted at the next scheduled commencement. He may receive a certified statement of completion of graduation requirements at the Office of the Registrar. No student will be permitted to participate in the commencement exercise unless his name appears on the commencement program.

# 19. Presence at Commencement Exercises.

A student ready for graduation must be present at commencement in order to receive his degree. A candidate may graduate **in absentia** with the permission of the Vice President for Academic Affairs.

## 20. Degree Candidacy Application.

Each student must make application for degree candidacy when preregistering for his final semester in the school year in which he is to receive his degree. The application form is available in the Office of the Regis-

### 21. Payment of Graduation Fees.

The graduation fee is due not later than the beginning of the semester in which the graduation takes place.

### OTHER GENERAL REGULATIONS

## 22. Classification of Students. Freshman: 0-29 Hours

Sophomore: 30-59 Hours lunior: 60-89 Hours Senior: 90 and above

Special Admission: See page

49

Post Graduate: Persons having completed a baccalaureate degree but taking courses for purpose of teacher certification, job preparation, and additional degree, or personal profit.

Transient: Students in good standing at other colleges and universities wishing to enroll at Missouri Southern State College for the purpose of transferring back to their institutions the credit earned. Admission requires completion of the application form, payment of the \$10.00 application fee, and a statement of good standing from the Vice President for Academic Affairs or Registrar of the student's home college or university.

Full-Time: A student enrolled for 12 or more semester hours.

Part-Time: A student enrolled in 11 or less semester hours.

#### 23. Dual Credit

A student who desires to earn credit concurrently at another institution or through correspondence, extension, advanced standing examinations, or USAFI examinations while enrolled in residence at Missouri Southern State College must secure advanced approval from the Vice President for Academic Affairs. Exceptions: Armed Forces Personnel will be granted sixty days from the date of their first enrollment to establish, through USAFI examinations, advanced standing in subject matter which they mastered while in the Armed Forces

### 24. Second Baccalaureate Degree.

A student may receive a second Baccalaureate degree when he has completed the first degree and all the reguirements of the second degree.

(Exception: Students may not count the professional education courses of the first degree as electives toward the second degree). The "Residency" requirements do apply.

## 25. Transcript Below "C" Average.

Students who are accepted with a below "C" transcript and who are below the minimum standards for progress, paragraph 39, will be placed on Academic Probation. Missouri Southern State College accepts all grades from any equally accredited institution including both "D's" and "F's". Except upper division "D's".

## 26. Grade Reports.

Grade reports are normally available within one week after the semester closes.

### 27. Mid-Semester Grades.

All students earning a "D" or an "F" in any course will receive a report following the eighth week of each semester.

# 28. Maximum Credit Hour Load.

To enroll in more than 18 semester hrs. during a semester or in more than 9 hrs. during a summer session, a student other than a music major must obtain prior written permission from the Dean of his School. Music majors may carry as many as 20 semester hrs. without permission from their Dean.

## 29. Late Registration.

No student will be permitted to enroll in a regular semester after the second week of classes and in a summer session after one week of classes. Any student enrolling after classes begin will pay a late enrollment fee.

## 30. Withdrawal from College.

A student who wishes to withdraw will initiate his withdrawal in the Office of Academic Services (Hearnes Hall 130). A student who withdraws prior to the end of the ninth week of a regular semester and the end of the 25th day of a summer session will receive a "W" on his permanent record. If the student withdraws after these deadlines, his courses will be listed on his permanent record with a grade of "F". Students who leave school without officially withdrawing shall receive grades of "F" in all courses.

# 31. Dropping Courses.

A student may initiate the dropping of a course in the Registrar's Office. Deadlines and grades cited in paragraph 30 apply.

## 32. Adding Courses.

A student may initiate the adding of a course in the Registrar's Office. A student will be permitted to add a course only upon the approval of his advisor. A fee of \$5.00 will be charged each time a student changes his program not at the request of the college. No course may be added after the second week of classes in a regular semester and after the first week of classes in the summer session.

#### 33. Class Attendance.

The primary objective of student and professor is the student's attainment of course goals. It is recognized that normally those students who achieve well are regular in class attendance. The professor, when giving a final semester grade, bases his evaluation on how well the student has achieved the course goals.

The student who misses a class does so at his own risk. He must assume the responsibility for work missed because of class absences. Professors are willing to assist students whose absences are caused by valid illnesses, college approved activities, and extenuating circumstances. The professor may require whatever evidence he needs to support the reason for absence. If a student is absent two class meetings more than the credit hours of the course, the student may be dropped from the course. However, if that student is maintaining a grade of "C" or better, he cannot be dropped from the course without his permission.

Because the attendance record is significant to the total record and useful in guidance and counseling, the professor keeps a record of individual class attendance. When he believes the absences are excessive he will report the fact to Student Services and they will in turn counsel with the student. The total number of student absences in a class will be reported to the Registrar's office along with the final grade at the end of the semester.

The student should be aware that absenting himself from the class invariably has a built-in penalty of lower academic achievement. Excessive absences usually result in failure to achieve the course goals.

## 34. Grading System.

Grade	Grade	9	F	C	ì	n	ts
A—Superior							4
B-Above Av	erage						3
C—Average							2
D-Minimum	Passing				• •		1
F-Failing							0
W-Withdray	val						

An incomplete must be made up by the end of the next semester or it will automatically be converted into an F. The student is to arrange with his professor the work essential to change the incomplete into a regular grade. Both credit and grade points are suspended until the incomplete (I) is converted to either a passing grade or an F.

A grade point average (GPA) at the end of any semester is the total number of grade points earned divided by the total number of hours attempted.

## 35. Official Transcripts.

An official transcript of the student's academic record bears the Registrar's signature and the college seal. Missouri Southern State College assumes no responsibility for the accuracy of a transcript after it leaves the Registrar's office.

Up to two weeks must be allowed after the close of a semester for the issuance of an up-to-date transcript. The transcript request must be made in writing. Each student is entitled to two (2) free transcripts. Additional copies cost \$1.00 each. No transcript will be issued unless all bills to Missouri Southern State College are paid or are current according to agreement with the business office.

#### 36. Auditors.

With the consent of the Dean of the School and the instructor concerned, a student may be admitted to a course as an auditor.

Auditors must be registered and pay fees as a regular or special student. They receive no college credit.

Courses taken for credit cannot be changed to an audit during the semester. Neither can a course taken for audit be changed to credit during the semester.

# 37. Good Standing and Eligibility.

Students enrolled at Missouri Southern State College are in good academic standing when they meet the normal progress toward graduation as described below. Those falling below the prescribed norm will be placed on academic probation. Persons failing to achieve normal progress toward graduation during the probationary period are subject to academic suspension.

Exception: Students receiving financial aid. See Page 43.

Those students competing in intercollegiate athletics or in organizations representing the college off campus are ineligible to participate in these programs when they fall below the norms set for minimum standards of progress.

## 38. Academic Bankruptcy.

A student may petition the Academic Bankruptcy Committee that one semester of his academic work be disregarded in computing his academic record. To be eligible for petitioning, a student must be currently enrolled, in good standing, and he must document the unusual conditions which justify his petition. The petition may be initiated in the Registrar's Office.

Academic Bankruptcy can never be used as a means of obtaining academic honors or athletic eligibility. Academic Bankruptcy will not remove grades from the student's permanent record. It merely allows one semester of recorded work to be eliminated in computing the student's scholastic average.

### Standards of Progress Toward Graduation.

A student's cumulative grade point average (GPA) is used to evaluate his progress. If the grade point average falls below the minimum standards of progress, his work is considered unsatisfactory.

Progress toward a degree is com-

puted on the following grade point averages:

## For Associate Degree Candidates

	urs Attempte		Point Avg.
1	-17 semeste	r hours	1.5
18	-33 semeste	r hours	1.6
34	-43 semeste	er hours	1.75
44	-55 semeste	r hours	1.9
56	and above		2.0

### For Baccalaureate Degree Candidates

1	-17 semester hours	1.5
18	-33 semester hours	1.6
34	-46 semester hours	1.75
47	-62 semester hours	1.8
63	-77 semester hours	1.85
78	-93 semester hours	1.9
94	-107 semester hours	1.95
108	and above	2.0

### 40. Academic Probation, and Suspension, and Reinstatement.

Each student should consider a grade point average of less than 2.0 as a warning.

Those falling below the standards of progress toward graduation will be placed on academic probation. If the grade point average is not raised to the minimum standard of progress during the probationary semester, the student is subject to immedicate academic suspension from the college.

A student receiving academic suspension must stay out of Missouri Southern State College one semester.

Students completing their semester of suspension must re-apply for admission through the Office of the Registrar.

Re-entry may be denied by the Vice President for Academic Affairs if the student cannot present evidence that indicates a high probability of academic success.

# 41. Repetition of Courses.

A course in which a student has made a grade of D or F may be repeated. The grade and grade points in the repeated class will be cancelled and the second grade will be used in computing grade point averages.

### 42. Honor Roll.

Dean's Honor Roll— To be placed on the Dean's Honor Roll, the student must be an undergraduate in regular standing and earn a minimum of 3.5 out of a possible 4.0 points on twelve or more semester hours during the fall and/or spring semesters.

## 43. Graduation Honors.

In recognition of superior scholarship, the college awards honors to associate degree and baccalaureate degree graduates as follows:

Associate Degree. The student must have completed a minimum of one half of the hours required for the degree in residence at Missouri Southern State College. The cumulative grade point average required to receive First Honors 3.90, Second Honors, 3.75, and Third Honors, 3.50.

**Baccalaureate Degree.** Cum Laude is awarded those students who have a cumulative grade point average of 3.50-3.74.

Magna Cum Laude is awarded those students who have a cumulative grade point average of 3.75-3.89.

Summa Cum Laude is awarded those students who have a cumulative grade point average of 3.90.

Eligibility for any one of the three honors also requires the candidate to study all his junior and senior years at Missouri Southern State College and earn a minimum of 60 semester hours of credit.

# 44. Course Numbers and Levels.

### Course Numbers:

- 0 -99 Not applicable toward baccalaureate degree.
- 100-199 Primarily for freshman 200-299 Primarily for sophomores.
- 300-399 Primarily for juniors.

400-499 Primarily for seniors.

Normally courses numbered 100-299 are considered junior or lower division level courses, and those numbering 300-499 are senior or upper division level courses. There are more significant distinctions between the sophomore and junior years than within the levels of the lower and upper divisions.

The student should check the catalog description of the course to see whether the second semester of a sequence course makes the first semester prerequisite.

Freshman are not permitted to take any course above the two hundred level unless qualified by advanced placement tests. The exception is infrequent.

All courses offered by this college are listed beginning on page 68 of this catalog. Immediately following each course title is a letter abbreviation of

the semester in which this course is to be offered. Students and faculty should use this as a guide in considering future enrollment. HOWEVER, THIS SHOULD NOT BE INTERPRETED AS A CONTRACT. MISSOURI SOUTHERN STATE COLLEGE RESERVES THE RIGHT TO DEVIATE FROM THIS COMMITMENT WHEN ENROLLMENT, OR OTHER FACTORS DICTATE.

- **45.** The Revised Standards for Veterans' Educational Benefits as adopted by the State Board of Education on February 17, 1977, are available in the Veterans Affairs Office. Each veteran should see the veteran counselor or veterans representative regarding these policies.
- **46.** Any exceptions to the regulations above must receive written approval from the Vice President for Academic Affairs.

# DEPARTMENTS, THEIR SYMBOLS, AND THEIR NUMBERS AT MSSC

Accounting (Acct.) 06 Art (Art) 50 Automotive Technology (Auto) 15 Aviation (AV) 15 Biology (BIO) 26 Business, General (GB) 06 Communications (Comm) 09 Computer Science (Comp.) 11 Criminal Justice Administration (CIA) 43 Dental Assistant Technology (DA) 17 Dental Hygiene Technology (DH) 17 Drafting and Design (DRAF) 48 Economics (Econ.) 06 Education (Educ.) 13 English (Eng.) 23 Foreign Language: French (Fren.) 16 German (Ger.) 16 Spanish (Span.) 16 Geography (Geog.) 45 Geology (Geol.) 40 Health Facilities Administration (HA) 17 Environmental Health Technology (EHT) (4-Yr.) 17 (2-Yr.) 17

History (Hist.) 45 Industrial Arts (IA) 13 Journalism (Jour.) 09 Law Enforcement (LE) 43 Machine Technology (MACH) 48 Marketing and Management (MM) 48 Mathematics (Math) 27 Medical Technology (MT) 17 Military Science (MS) 28 Music (Mus.) 50 Nursing (Nur.) 17 Office Administration (OA) 07 Paralegal Studies (PLS) 22 Philosophy (Phil.) 38 Physical Education, Health, Recreation (HPER) 13 Physics (Phys.) 40 Political Science (PSC) 45 Psychology (Psy.) 42 Radiologic Technology (RAD) 17 Sociology (Soc.) 45 Speech (Spch.) 09 Theatre (Th.) 50

# THE CURRICULUM

# SCHOOL ORGANIZATION AND OBJECTIVES

The college is organized into four schools, each with a dean as its executive. The schools are subdivided into departments. The schools and departments are under the administrative supervision of the Vice President for Academic Affairs.

The schools objectives and programs are as follows:

# I. School of Arts and Sciences:

# Objectives of departments of fine arts, english and communications

These departments comprise those areas of learning in which the student is made aware of some of mankind's greatest thought and noblest art. Through the study of art, journalism, language, literature, music, philosophy, speech, and theatre, the student enlarges his capacity to express himself and at the same time develops his ability to comprehend and appreciate the creative efforts of others.

These departments are concerned with creative self expression, although distinct in that each is a specific discipline or area of study.

A. Viewed in relation to the total college curriculum, the functions

of the departments are twofold:

1. General Education—Certain courses offered in every area of Humanities and Fine Arts are especially designed to make available to each student skills and understanding which greatly add to his personal development, regardless of his specialization. (a) Through courses in English and speech he will increase his ability to read, write, and speak his own language and deepen his understanding of its literature. (b) By studying foreign languages, he will learn to communicate with people of other nations and to appreciate the intellectual contributions of cultures other than his own. (c) Through participation in theatre, he will develop poise and power of oral expression. (d) In a guided study of the masterpieces of music and art, he will learn to enjoy and appreciate world treasures. (e) In philosophy, he will become familiar with the problems of knowledge, the natural world, and society, and with the quest for the good life.

2. Major or area of concentration—To achieve a high level of competency in his special interests, a student elects an area of concentration. (a) Programs in art, English, foreign languages, speech, theatre, and music form major areas for candidates for the Bachelor of Science in Education degree. (b) A lesser concentration in several of these areas is required for a Bachelor of Science in Education degree with a major in elementary education. (c) Students not planning to teach but desiring competency in an area may elect to receive a Bachelor of Arts degree

for personal enrichment or as preparation for graduate study.

B. In addition to curricular functions, the departments exert a strong influence upon the cultural life of the college and community.

1. The musical and dramatic performing organizations offer opportunities for participation to all qualified students, thus serving as a

valuable outlet for aesthetic self-expression.

2. The regular publication of the college newspaper, The Chart, not only provides practical experience for students interested in journalism, but also serves the college community and alumni with reports of college activities.

- 3. The creative arts publication written and edited by MSSC students, under the sponsorship of the English and Fine Arts Departments, serves the dual purpose of providing an outlet for artistic and literary expression and practical experience in the editorial functions associated with publishing. Through this medium, young writers and artists may not only gain experience in the development of their talents, but also enrich the cultural resources of the college community. This is an opportunity that they and their editors have for speaking to and for the other students; and, at the same time, for interesting, entertaining, and influencing all at MSSC.
- 4. Displays of art works by students and faculty in the Art Gallery and in the exhibits sponsored by Spiva Art Center, housed in the Gallery, stimulate the artistic community.
- 5. The services of members of the faculty of all departments to community organizations—professional, cultural and civic—aid in acquainting the public with the programs of the college.

# Objectives of departments of geography, history, political science, and sociology

The purposes are to provide the student with the skill, attitudes, and understanding necessary to give life direction and meaning; to encourage the student to think and to evaluate the broad issues of life; and to stimulate his acquiring new interests that he may pursue for the sheer pleasure of learning.

The school has a special concern in the preparation of social science teachers for the schools of Missouri and the undergraduate education of students who are planning careers in government and community service.

The objectives of the school are:

1. To prepare students for certification as social science teachers in the elementary and secondary schools.

2. To provide the undergraduate education needed for students desiring to continue graduate work in history, political sciences or sociology.

To provide a program of extracurricular activities that aid in introducing the student to his future role of service to community and nation.

### THE CURRICULUM

II. School of Business Administration (Departments of accounting, economics and finance, general business, marketing and management, and office administration):

(1) To provide managerial and administrative education designed to enable individuals to accept positions of responsibility and leadership in business, industry, government, and education; (2) To prepare individuals for graduate education in business and economics; (3) To provide and to emphasize excellence and efficiency in all instructional functions; (4) To encourage and support the professional development and growth of the School's faculty; (5) To provide for specific needs of business, industry, government, education or professional groups by developing and teaching special courses designed to meet those needs; (6) To provide general education offerings for Missouri Southern State College Students; (7) To provide a service function to other curricular areas of education; (8) To provide services to the business community in the form of publication of area economic data and special studies of the region, consultation by faculty and students, economic data bank, etc.

It is the primary purpose of the School of Business Administration to continuously develop and improve the caliber of instruction, programs, and courses which will achieve these objectives and, thereby, fulfill the educational needs and goals of the students. The faculty use new teaching methods and variations of older techniques. The student will find that the approach to learning may be by means of computer simulations, role playing, business games, films, intensive reading, report writing, lectures and case method. Regardless of the method employed, the student is expected to actively participate in discussions and in the learning process.

The aim is to prepare individuals for careers, not by drill and memorization, but by stimulating rigorous, imaginative, analytic and probing attitudes. The scope of the Business School curriculum, coupled with a wide range of general education and nonbusiness subjects reflects the School's belief that higher education should prepare students for satisfying achievements in life as well as in business.

The School of Business Administration offers three baccalaureate degree programs, an associate degree, and a certificate of achievement:

- 1. Bachelor of Science in Business Administration with majors in:
  - (a) Accounting
  - (b) Economics & Finance
  - (c) General Business
  - (d) Marketing & Management
- 2. Bachelor of Science with a major in Management-Technology
- 3. Bachelor of Science in Education with a major in Business Education (two plans)

- 4. Associate of Science degree with majors in:
  - (a) Accounting
  - (b) General Business
  - (c) Secretarial Science
- 5. Certificate of Achievement: Secretarial Typist

III. School of Education and Psychology (education, health, physical education and recreation, and psychology):

The programs of this school are designed to reflect the following

general aims:

(1) To prepare persons who demonstrate by their behavior the professional, social, emotional, and intellectual maturity necessary to preform effectively as elementary and secondary school teachers; (2) To prepare persons who display a meaningful philosophy of living and a dedication to service; (3) To prepare persons who indicate in their daily lives a concern for and knowledge of good physical and mental health; (4) To teach creative and beneficial leisure-time activities that will serve the student throughout life; (5) To prepare persons with a degree of understanding in the area of psychology, which is necessary to perform well as a graduate student or to be of service to society in a service vocation.

The school provides specific course work leading to the degrees of Bachelor of Science in Education, Bachelor of Arts with a major in Psychology, Bachelor of Science with a major in Psychology, and a Bachelor of Science in Education with a major in Special Education-

Psychology.

More specifically the Department of Education is responsible for teaching and coordinating of the professional education sequence in the Bachelor of Science degree. It also administers the major programs in elementary education and special education. The department of Health, Physical Education and Recreation serves the basic requirements for all college students, provides a major in professional physical education, and provides minors in driver education instruction and athletic coaching. The Department also supervises the women's and men's intramural sports programs.

- IV. School of Technology (Departments of automotive technology, aviation, computer science, criminal justice, dental assisting, dental hygiene, drafting & design, environmental health technology, health administration, industrial arts, law enforcement, machine technology, medical technology, military science, nursing, and radiologic technology.)
- (1) To provide an opportunity for post-high school education for students seeking skills preparing them for employment. (2) To give both specialized instruction and general education in sufficient balance to prepare for living as well as working in society. Student enrolling in the specialized courses of this division should know that some of them may not be applicable toward a baccalaureate degree if he should later decide to seek it.

# **COURSES OF INSTRUCTION**

### **ACCOUNTING**

### **School of Business Administration**

Cunningham; Finke; Goode; Paapanen; Schwinghammer; Skeith

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Accounting major and an Associate of Science degree with the Accounting major. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

### 06.0201-201—Principles of Accounting I (F,S)

3 hrs. cr.

Fundamental principles of accounting as applied to modern business practice. Study of the complete accounting cycle and analysis of balance sheets and income statements. Emphasis on a single owner business. Prerequisite or corequisite: Math 131.

## 06.0201-202—Principles of Accounting II (F,S)

3 hrs. cr.

A continuation of Accounting 201 with emphasis on corporation accounting.

#### 06.0201-312—Intermediate Accounting I (F,S)

4 hrs. cr.

Intermediate Accounting I is the first of two courses that comprehensively covers financial accounting concepts and standards for business enterprises (with emphasis on the corporation). The course is organized in four major areas: 1. A study of the environment of financial accounting and the basic theoretical considerations underlying financial accounting concepts and standards. 2. A review of the financial accounting process from transaction analysis to the financial statements. 3. Accounting for current assets. 4. Accounting for property, plant and equipment assets and intangible assets. Prerequisite: Acct 202.

### 06.0201-322—Intermediate Accounting II (F,S)

4 hrs. cr.

Intermediate Accounting II is the second of two courses that comprehensively covers financial accounting concepts and standards for business enterprises (with emphasis on the corporation). The course is organized in four major areas: 1. Accounting for current liabilities, long-term liabilities and long-term investments. 2. Study of shareholders' equity and earnings per share. 3. Accounting for pensions, leases and income taxes. 4. Financial statement reporting and analysis. Prerequisite: Acct 312.

#### 06.0201-302—Advanced Accounting (S)

3 hrs. cr.

Application of accounting principles of partnerships, branch accounting, business combinations, consolidated statements, segment reporting, reporting by multinational companies, bankruptcy and corporate reorganization, estates and trusts. Prerequisite: Acct 322.

## 06.0201-310—Cost Accounting (F,S)

3 hrs. cr.

Study of accounting cost systems providing information generation for managerial planning and control. Special emphasis on product and process cost systems as applied to industrial enterprise. Prerequisite: Acct 202.

### 06.0201-401—Tax Accounting (F,S)

3 hrs. cr.

Procedures for reporting federal income taxes with emphasis on income and deductions for individuals. Practice is given in preparing federal income tax returns. Prerequisite: Acct 202 or permission.

(See General Business 401)

06.0201-411-Auditing (F,S)

3 hrs. cr.

This course provides an overview of the certified public accounting profession with special attention to auditing standards, professional ethics, the legal liability inherent in the attest function, the study and evaluation of internal control, the nature of evidence, the growing use of statistical sampling, the impact of electronic data processing and performing an audit. Prerequisite: Acct 322, Intermediate Accounting II.

06.0201-412-C.P.A. Problems (F)

3 hrs. cr.

A course designed to guide the student in preparing for the Uniform Certified Public Accountant Examination. Topics covered include methods of studying for the Examination, lecture and problem solving exercises on Examination subjects, and a review of appropriate theoretical and technical pronouncements. Prerequisite: 21 hours of accounting including Acct 411, Auditing, or senior standing and permission of the instructor.

06.0201-420—Accounting Theory (S)

3 hrs. cr.

Study of the theory of income, asset valuation and history of accounting thought. Critical discussion of the authoritative pronouncements of the Financial Accounting Standards Board. Provides a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting principles. Prepares the student for the C.P.A. Theory Examination. Prerequisites: Intermediate Accounting II.

**06.0201-421—Governmental and Institutional Accounting (F)** 3 hrs. cr. Study of accounting principles, standards, and procedures that apply to nonprofit type organizations such as state and local government, schools, hospitals and churches. Prerequisites: Intermediate Accounting I.

06.0201-491—Internship in Public Accounting (F)

hrs. cr.

Selected senior accounting students serve an internship of approximately six weeks as junior accountants on the staff of practicing certified public accountants and/or private industry. The program is supervised by the faculty. An oral and written report is required. Course study includes the following topics: Duties and liabilities of public accountants, audit programs, ethics and evaluations, practical tax applications. Prerequisites: Acct 322, 401, 411 and/or consent of the internship committee.

06.0201-498—Seminar in Accounting (demand)

1-3 hrs. cr.

A seminar for upper division accounting or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission. Examples of seminars offered in the past are:

498-Seminar in Advanced Tax

498-Seminar in Managerial Accounting

498-Seminar in Advanced Auditing

498-Seminar in Advanced Cost

06.0201-499—Independent Study in Accounting (demand) 1-3 hrs. cr.

Individually directed readings, research, and discussion in selected areas of accounting for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission and 3.00 G.P.A.

## ART

## School of Arts and Sciences Department of Fine Arts

Fowler, Director; Christensen; Cole; Dishman; Hess

Career opportunities available for the qualified Bachelor of Arts degree graduates are in Commercial Art, free-lance, and private studio lessons. This degree

### **COURSES OF INSTRUCTION**

prepares the graduate for an advanced degree program towards the masters

degree in a specific art discipline.

The Bachelor of Science in (Art) Education degree graduates are certified through the teacher education program for K-12, 7-9 or senior high school levels in the State of Missouri.

"Requirements for a major in art for the Bachelor of Arts degree are 53 SCH in art including: Art 100, 120, 130, 132, 211, 230 or 205, 232, 312 and 490; 9 SCH of art history selected from 301, 302, 303 or 304; and 18 SCH of art

electives approved by the student's advisor."

"Requirements for a major in art for the Bachelor of Science in Education degree with art as one of two teaching fields (Plan A) are 42 semester hours in art including: ART 100, 120, 130, 132, 211, 220, 230, 232, 312; 9 SCH of art history selected from 301, 302, 303 or 304; and 6 SCH of art electives approved by the student's advisor."

"Requirements for the major in art for the Bachelor of Science in Education degree with art as the only teaching field (Plan B) are 50 SCH in art including: ART 100, 120, 130, 211, 220, 132 or 230, 232, 312 and 490; 9 SCH of art history selected from 301, 302, 303 or 304; and 15 SCH of art electives ap-

proved by the student's advisor.

The degree requirements in all three programs (B.A., B.S.E.-Plan A, and B.S.E.-Plan B) are such that it is very important that students majoring in art meet with their faculty advisor each semester. Students are responsible for contacting their advisor after completing twenty-one (21) semester hours in art to make application for their Junior Review. For this review, students are required to submit a representative sampling of their work, a record of academic progress, and a statement of intent and/or objectives for examination by a committee of the art faculty. Written permission of the Junior Review Committee is required for a student to enroll in Art 490, Senior Exhibit. The committee meets at the beginning of each fall and spring semester. Entering transfer students must make application for the review during their first semester. Application forms and more detailed information are available in the Department of Art office, Room 303, Art Building.

General Education requirements for one course in Area 2, Humanities and

Fine Arts, are fulfilled by any art course.

# 50.0799-100-Art Composition (F and/or S)

3 hrs. cr.

Introduction to studio art projects using fundamental techniques, media, and theories. Specially recommended toward meeting General Education requirements.

50.0703-110—Art Appreciation (F and/or S)

3 hrs. cr.

A survey designed to increase appreciation of the visual arts through readings, slide lectures, library research, and visits to the Spiva Art Center. Through this survey, developments of the cognitive and critical processes as they relate to the visual arts are emphasized. Specially recommended toward meeting General Education requirements.

50.0202-120—Beginning Ceramics (F and/or S)

3 hrs cr.

Methods and techniques of hand building are studied with application to modeling and throwing clay forms. Six studio hours per week. Lab fee required.

50.0705-130—Beginning Drawing (F and/or S)

3 hrs. cr.

Free-hand drawing projects using art media and techniques applied by master artists. Six studio hours per week. Lab fee required. Prerequisite: Art 100 or instructor's approval.

50.0401-132—Introduction to Design (F and/or S)

3 hrs cr.

Foundation laboratory projects using art principles and elements of structure. Six studio hours per week.

50.0299-200-Arts & Crafts (F and/or S)

3 hrs. cr.

Basic crafts survey exploring materials and processes of traditional and contemporary handicrafts. Required for Special Education certification. Open to all students.

50.0206-205—Beginning Jewelry Design/Metalsmithing (F and/or S)

3 hrs. cr.

Design fabrications, casting, and forging processes are creatively explored. Six studio hours per week. Lab fee required. Prerequisite: Art 100 and/or 132.

50.0709-211—Beginning Sculpture (F and/or S)

3 hrs. cr.

Exploration of forming methods and shaping techniques involving clay, wood, plaster, and mixed media with a preliminary introduction to sand casting (aluminum) and lost wax casting (bronze) processes. Six studio hours per week. Lab fee required. Prerequisite: Art 132 and/or 230.

13.1302-220-Art Education

3 hrs. cr.

Creative art activities using media and processes with emphasis on methods of instructing art in elementary schools. Required for both Elementary Education majors and Secondary Art Education majors.

50.0401-230—Basic Form (F and/or S)

3 hrs. cr.

Exploration of relationships of parts to form. Projects include two and three dimensional. Six studio hours per week. Lab fee required. Prerequisite: Art 100.

50.0708-232—Beginning Painting (F and/or S)

3 cr. hrs

Procedures, techniques, and basic fundamentals of painting with oil, acrylic, watercolor, egg tempera and mixed media. Six studio hours per week. Lab fee required. Prerequisite: Art 100 and 130.

50.0705-300—Advanced Drawing (F and/or S)

3 hrs. cr.

Self exploration of various drawing elements including artistic anatomy, composition, structure, and aesthetics. Six studio hours per week. Lab fee required. May be repeated for a total of six (6) credit hours. Prerequisite: Art 100, 130, or approval of the instructor.

50.0703-301-Art History, Prehistoric through Gothic

3 hrs. cr.

A survey of the visual arts from the Ancient World to the Gothic Age in Eurpoe.

50.0703-302-Art History, Renaissance through Baroque

3 hrs cr

A comparative study of the visual arts of Southern and Northern Europe from the early Renaissance through the Baroque and Rococo periods.

50.0703-303—Art History, 19th Century

3 hrs. cr.

A survey of Western Art in Europe and the United States from Neo-Classicism and Romanticism to Post-Impressionism.

50.0703-304-Art History, 20th Century

3 hrs. cr.

A study of the mainstreams of Western Art in Europe and the United States, including its sources and influences. Emphasis will be placed on the succession of modernist art movements in France and Germany from 1900 to 1945 and in the United States from 1945 to present.

50.0799-305-Seminar (F and/or S)

3 hrs. cr.

Student art problems investigated with group participation. Requirements: research papers and oral presentations of investigated problems. Prerequisite: 21 credit hours in art.

50.0708-310—Transparent Watercolor (F and/or S)

3 hrs. cr.

Techniques and aesthetic processes of aquarelle painting using landscapes, figures, and still life as subjects. Six studio hours each week. Lab fee required. May be repeated for a total of six (6) credit hours. Prerequisite: Art 130 or permission of the instructor.

50.0799-312—Beginning Printmaking (F and/or S)

3 hrs. cr.

Procedures, techniques, and fundamentals of the Intaglio process; etching, dry point, aquatint, softground and other mixed media including color etching. Emphasis on drawing and design. Six studio hours per week. Lab fee required.

50.0709-321—Advanced Sculpture (F and/or S)

3 hrs. cr.

An extension of Beginning Sculpture including mold making and foundry techniques of sand and lost wax casting. Six studio hours per week. Lab fee required. May be repeated for a total of six (6) credit hours. Prerequisite: Art 211.

50.0709-322—Advanced Sculpture (F and/or S)

3 hrs. cr.

Continuation of 321. Six studio hours per week. Lab fee required. May be repeated for total of six (6) credit hours. Prerequisite: Art 211.

50.0206-330—Advanced Jewelry Design/Metalsmithing (F and/or S)

3 hrs. cr.

Advanced methods and techniques of complex forms will be explored for jewelry and metalsmithing design. Six studio hours per week. Lab fee required. May be repeated for a total of six (6) hours. Prerequisite: Art 205.

50.0708-401—Advanced Painting (F and/or S)

3 hrs. cr.

Students select an individual problem for self-development using variety of media. Six studio hours per week. Lab fee required. May be repeated for a total of six (6) credit hours. Prerequisite: Art 130 and 232.

50.0202-407—Advanced Ceramics (F and/or S)

3 hrs. cr.

Advanced methods, techniques, and procedures of pottery making and design in clay. Lab fee required. Six studio hours per week. May be repeated for a total of six (6) credit hours. Prerequisite: Art 120.

50.0402-412—Commercial Art

3 hrs. cr.

An introduction to the basic principles of advertising design, lettering, layout, and pasteup. May be repeated for a total of six (6) credit bours. Prerequisite: Art 120 and 232.

50.0799-420—Special Projects in Art I (F and/or S)

3 hrs. cr.

An advanced studio survey elected by the student in a particular area of Art. Students attend a regular scheduled course but complete an independent special project approved by the instructor. Requirements: (1) An exhibit of the special projects completed, (2) Oral summation to the regular course students, (3) Formal paper documenting the special projects. PREREQUISITE—Completion of advanced courses and written approval of instructor. Lab fee required.

50.0708-421—Portraiture (F and/or S)

3 hrs. cr.

Fundamental methods in protraiture. Various drawings and painting media for structure of the head. Artistic head anatomy used for each study. Six studio hours per week. Lab fee required. May be repeated for a total of six (6) credit hours. Prerequisite: Art 130, and 232 or 300.

50.0799-430—Advanced Printmaking (F and/or S)

3 hrs. cr.

Advanced Intaglio techniques and color printing. Advanced studio methods for color registration, transfer and drawing, drypoint, mezzo-tint, etching, engraving, and mixed media. Emphasis on design, drawing, concept, technical proficiency, and presentation.

Six studio hours per week. Lab fee required. May be repeated for a total of six (6) credit hours. Prerequisite: Art 312 or approval of the instructor.

50.0799-440—Special Projects in Art II (F and/or S)
Same as Art 420. PREREQUISITE—Special Projects in Art I.

3 hrs. cr.

50.0799-490—Senior Exhibit (F)

2 hrs. cr.

Special study in any art media or technique chosen by the student. Requirements: (1) Art survey paper, (2) Senior art exhibit, (3) Oral presentation. Prerequisite: Senior standing and written permission of the Junior Review Committee.

### **ASTRONOMY**

### School of Arts and Sciences Department of Physical Science

Baiamonte, Department Head; Phillips; Sloan

The astronmy course is used to supplement other major areas and for teacher certification in General and Earth Science.

### (See Physics)

40.0201-300—Astronomy (demand)

3 hrs. cr.

Solar system, gravitation, Kepler's laws, celestial coordinate systems, telescopes and optical systems, stellar evolution, nebula, galactic structure, and cosmology. Two hours lecture and one two-hour lab a week. Prerequisites: Physics 100 or equivalent and one year of high school algebra.

### **AUTOMOTIVE TECHNOLOGY**

## School of Technology

Adams; Barrow

The major emphasis in Automotive Technology is specialization in automotive service and business management. The training also provides the background for entry into a general automotive repair or specialized field where a technical knowledge of machines, tools, and testing equipment is required.

The Associate of Science degree in Automotive Technology requires the completion of the general education courses (See Page 57) plus the following: Auto

102, 122, 124, 202, 204, 210, 262, and Draf 110.

15.0803-102—Automotive Engines (F)

6 hrs. cr.

A beginning course in the theoretical and practical application of internal combustion engines. This course covers engine operation, cycles, design and service of component and accessory systems. The laboratory provides the student with the opportunity to develop skills in the diagnosis and service of engines and their supportive systems. Three hours lecture; six hours laboratory per week.

15.0803-122—Automotive Electrical Systems (S)

6 hrs. cr.

Course of study of electricity, the ignition system and electrical devices found on the internal combustion engine. Emphasis is placed on the operation, diagnosis and service of each of these systems. The laboratory period provides the student an opportunity to apply the theoretical knowledge to practical problems. Three hours lecture; 6 hours laboratory per week.

### 15.0803-124—Automotive Fuels, Fuel Systems & Emission Control (S)

6 hrs. cr.

A study of the design, operating principles, and service procedures of the automotive fuel and emission system. In addition, the student will examine the refining of fuels, lubrication materials, and alternate fuels. The laboratory emphasis will be on the diagnosis and service of these systems and their components. Three hours lecture and six hours of laboratory per week.

## 15.0803-202—Automotive Chassis, Brakes and Suspension Systems (F)

6 hrs. cr.

A study of the design, operating principles and service procedures of the chassis, suspension system, and brakes of the modern motor vehicle. The laboratory emphasizes the diagnosis and service of these components. Three hours lecture; 6 hours of laboratory per week.

## 15.0803-204—Automotive Transmission & Drive Train (F) 3 hrs. cr.

A study of the design, operating principles, and service procedures of the automotive transmission and drive line of the modern motor vehicle. The laboratory emphasis will be on the diagnosis and service of these components. Four hours lecture, four hours laboratory per week for half a semester.

### 15.0803-240—Diesel Engines (S)

5 hrs. cr.

A course in the theory of operation, and the diagnostic and service techniques needed to service the diesel engines found in passenger cars and light trucks. The laboratory period will provide the student with an opportunity to apply the service and diagnosite technique to current diesel engines. Three hours lecture; 4 hours laboratory per week.

### 15.0803-222—Automotive Air Conditioning (F)

3 hrs. cr.

A course to familiarize the student with automotive air conditioning unit. The emphasis is placed on service and diagnosis of these units on and off the vehicle. Four hours lecture, four hours lab per week for half a semester.

Prerequisite: 15.0803-122 Automotive Electrical Systems.

### 15.0803-262—Auto Service Management (S)

5 hrs. cr.

The principles of shop design, personnel and production management, and industrial safety. The laboratory provides the student with the opportunity to gain additional experience in the area he chooses to specialize. Three hours lecture; 4 hours laboratory per week.

Prerequisite: Auto 102, 122, 202, and 222 with minimum grades of C.

#### 15.0803-250—Automotive Body and Paint (demand)

7 hrs. cr.

A study of the methods of auto body construction, repair, refinishing processes and materials. The laboratory provides the students with the opportunity to repair various types of body damage and experiment in the use of the various types of repair and refinish materials. Three one-hour lectures; 12 hours laboratory per week.

## 15.0803-298—Selected Topics in Automotive Technology (demand)

1-8 hrs. cr.

Study of special topics in Automotive Technology. Each offering of the course on a special topic or topics not normally included in another course. Prerequisites to be determined by the department and stipulated in syllabus.

### 15.0803-498—Seminar in Automotive Technology (demand) 1-3 hrs. cr.

Covers specialized knowledge and skills related to new developments in automotive design and service. Topics will vary by the semester and situation. Prerequisite: Senior standing in management-technology and the Associate Degree in Automotive Technology.

15.0803-499—Independent Study in Automotive Technology (demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of automotive technology for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission of instructor.

#### BIOLOGY

### School of Arts and Sciences

Ferron, Department Head; Elick; Gibson; Jackson; Orr; Prentice; Stebbins; Tillman

The Biology Department provides an opportunity for students to pursue careers in the areas of classical, allied health, or environmental aspects of biology.

Many of our students prepare for one of the health professions.

Requirements for a major in biology for the Bachelor of Science degree are 40 semester hours of biology including one general education biology course (Bio 101, 110 or 121), 112, 122, 210, 211 or 231, 305, and 490. Upper division students may follow interest, but must take at least one course from each of the following areas:

Group A-A 3 or 4 semester hour upper-division Botany course. Group B-A 4 or 5 semester hour upper-division Zoology course. Group C-A semester hour upper-division Environmental course.

Majors may choose to take a biology exemption examination for advanced placement. Those who pass this examination may substitute an upper division biology course for the biology general education course but still must receive grades for forty hours of biology.

Additional requirements are 25 semester hours of mathematics and science

course work to include:

Math 140 or higher (Math 112 and 130 may be substituted)

Chem 101, 102, and either 300 or 301.

Phys 151 or higher.

Two semesters of both organic chemistry and physics are strongly recommended for students who intend to enter graduate or professional schools.

Requirements for a major in biology for the Bachelor of Science in Education degree with biology as one of two teaching fields (Plan A) are 23 semester hours of biology including Bio 101, 122, and 306 plus 11 additional upper division semester hours. Supporting requirements are 15 semester hours of mathematics and science course work to include Math 140 or higher (Math 112 and Math 130 may be substituted). Chem 101, and either Phys 151 or Geol 110. See page 106 for teacher education requirements.

Requirements for a major in biology for the Bachelor of Science in Education degree with biology as a single teaching field (Plan B) are 35 semester hours in biology including Bio 101, 112, 122, 211 or 231, 305 and 306 plus 11 additional upper division semester hours. Supporting requirements are 20 semester hours of mathematics and science course work to include Math 140 or higher (Math 112 and 130 may be substituted), Chem 101, 102, and 300 or 301. See page 106 for teacher education requirements.

Majors may take Bio 131, 261, 271 or 310; but should be advised that these courses will not count toward semester hour totals for any of the departmental

degrees.

General Education requirements can be met by taking either Bio 101, 110 or 121.

26.0101-101—General Biology (F,S)

4 hrs. cr.

A one semester general treatment of the unifying principles of living things including cell structure and function, metabolism, genetics, evolution, and ecology. Emphasis will be upon these biological principles as they relate to humans. Three lectures and one 2 hr. lab per week. Fulfills general education requirement (formerly Bio. 100).

26.0101-110—Man and Environment (F,S)

4 hrs. cr.

A survey of environmental aspects of Biology including pollution, land use, population, energy, and organismic responses to these problems. Cellular, systemic, and genetic mechanisms are included. Three lectures and one 2 hr. lab per week. Fulfills general education requirement.

26.0301-112—Botanical Survey (F,S)

3 hrs. cr.

The morphology, physiology, and classification of plants are studied with an emphasis upon the diversity of the plant world. Two lectures and one 2 hr. lab per week. Prerequisite: Bio 101.

26.0701-121—General Zoology (F,S)

4 hrs. cr.

An introductory study of the basic principles of cytology, metabolism, and genetics. A brief survey of those invertebrates that directly relate to man will be made. Emphasis will be placed upon medical terminology as it relates to the anatomy of man in preparation for Bio. 221. Three lectures and one 2 hr. lab per week. Fulfills general education requirement (formerly Bio. 120).

26.0701-122—Zoological Survey (F,S)

3 hrs. cr.

The morphology, physiology, and classification of animals are studied with an emphasis upon the diversity of the animal world. Two lectures and one 2 hr. lab per week. Prerequisite: Bio 101.

26.0101-131—Animal Science

5 hrs. cr.

A study of the fundamental principles of animal science at an introductory level. It includes kinds of livestock, related anatomy and physiology, genetics, and nutrition. Also includes discussion of livestock contributions to human use and needs. Three lectures and two 2-hour labs per week.

26.0401-210—General Physiology (F,S)

4 hrs. cr.

A detailed study of biological function at the cell and molecular level. Physiological characteristics of both plant and animal cells will be studied. Three lectures and one 2 hr. lab per week. Prerequisite: Bio. 101, 112, 122, Chem. 102.

26.0501-211—Microbiology (S)

5 hrs. cr.

The structure and function of microorganisms will be studied with partical focus placed on physiological differences used in classification and the role these organisms play in the environment. Three lectures and two 2 hr. labs per week. Credit toward the biology major may include Bio. 211 or 231 but not both. Prerequisite: Bio. 101, Chem. 102 or permission of the instructor.

26.0601-221—Human Anatomy and Physiology (F,S)

5 hrs. cr

Structure and function of the human body will be utilized to study both the arrangement of organs and coordination of body systems. Three lectures and two 2 hr. labs per week. Credit toward the biology major may include Bio. 221 or 306 but not both. Prerequisite: Bio. 121 or 101 and 122.

26.0501-231—Fundamentals of Medical Microbiology (F) 5 hrs. cr.

For students interested in paramedical professions. Topics of study include the general principles of microbiology, immunology, and host-parasite relationships of pathological

organisms. Three lectures and two 2 hr. labs per week. Prerequisite: 1 course each of a college chemistry and a biological science. Credit toward the biology major may include either Bio. 211 or 231 but not both.

26.0610-240-Radiation Biology

3 hrs. cr.

A survey of the various types of radiation affecting man, the uses of radiation, and methods for monitoring radiation levels will be studied. Special emphasis will be placed on the types of physiological damage that occurs to tissues following ionizing radiation. Three lectures per week. Prerequisites: Bio 221 and five hours of chemistry or acceptance into the School of Radiologic Technology.

26.0609-261—Animal Nutrition

3 hrs. cr.

A study of fundamental principles of animal nutrition and practical problems of feeding livestock. Three lectures per week. Prerequisite: Bio. 131.

26.0101-271—Principles of Plant Propagation

3 hrs. cr.

A comprehensive study of the principles of plant propagation emphasizing anatomy and physiology as well as principles controlling plant growth. Technical skills such as budding, grafting, and making cuttings must be mastered. Two lectures and one 2 hr. lab per week.

26.0101-298—Selected Topics in Biology (F,S)

1-8 hrs. cr.

Study of special topics in Biology. Each offering of the course will be on a specific topic or topics not normally included in another course. Prerequisites: Bio. 101, 112, and 122.

26.0703-305—Genetics (F,S)

4 hrs. cr.

A comprehensive introduction to the principles of heredity and variations as exemplified by both higher plants and animals. Emphasis will be placed on the cytological and molecular approach to gene action, linkage, recombination and various other genetic mechanisms. Labs will be designed primarily to allow students the opportunity to work experimentally with genetic principles and develop scientific methodology. Three lectures and one 2 hr. lab per week. Prerequisite: Bio. 101, 211 or 231, and Chem. 101 (formerly Bio. 202).

26.0601-306—Human Physiology and Anatomy (F,S)

For students working on a Bachelor of Science degree. Structure and function of the human body will be utilized to study both the arrangement of organs and coordination of body systems. Lectures and labs will coincide with Bio. 221. Three lectures and two 2 hr. labs per week. Credit toward the biology major may include Bio. 221 or 306 but not both. Prerequisite: Bio. 121 or 101 and 122.

26.0603-310—Field Biology (F,S)

2 hrs. cr.

The course engenders appreciation and understanding of the local flora and fauna, and provides information pertinent to preparation and preservation of specimens for laboratory use. Consists of one lecture and one 2 hr. lab per week. Prerequisite: Bio 101 or permission of instructor. (Does not count toward any biology major.)

26.0603-312—Environmental Biology (F)

4 hrs. cr.

A study of environmental factors and their interactions with living things. Emphasis is placed on human ecology and wise natural resourse utilization. Three lectures and one 2 hr. lab per week. Prerequisite: Phys. 100, Bio. 101, Math 110, or permission of the instructor.

26.0301-316—Economic Botany (F)

3 hrs. cr.

A comprehensive study of the economic uses of plants. The present and possible future value of lower plants is covered. Emphasis is placed upon the economic aspects of higher plants from an agricultural, horticultural, and crop selection viewpoint as well as from a pharmacological, textile usage, ect. view. Three lectures a week. Prerequisite: Bio. 101 or equivalent (formerly Bio. 201).

26.0401-318—Cell Biology (S,Odd)

4 hrs. cr.

A study of cell structure and function in detail. Emphasis will be placed upon both cytological anatomy and physiology. Three lectures and one 2 hr. lab per week. Prerequisite: Bio. 112, 122, 210, 305, and Chem. 301 or consent of the instructor.

26.0301-322—Taxonomy of Flowering Plants (S)

4 hrs. cr.

The relationships among selected plant groups will be studied with emphasis placed on classification and descriptions of taxa, nomenclature and concepts concerning the evolutionary sequence of various plant characters. Southwestern Missouri flora will be emphasized. Two lectures and two 2 hr. labs per week. Prerequisites: Bio. 101 and 112.

26.0704-331—Comparative Chordate Anatomy (F)

Designed for the serious student of biology or those students planning to enter professional schools of medicine, dentistry or veterinary science. Acquaints the student with the evolutionary trends of chordate structure and development with special emphasis on the vertebrate organs and organ systems. Two lectures and two 3 hr labs per week. Prerequisite: Bio. 101 and 122.

26.0702-332—Introduction to Entomology (F, Even)

3 hrs. cr.

A study of the insects with respect to collecting methods, taxonomy, life history, morphology and evolution. Prerequisites: Bio. 101 and 122. Two lectures one 3 hr. lab per week.

26.0501-342—Microtechnique (demand)

2 hrs. cr.

A study of the principles of preserving, fixing, staining and mounting biological materials. Prerequisites: Bio. 101 and 121. Two 2 hr. lab per week.

26.0701-344—Ichthyology (S, Even)

3 hrs. cr.

A course investigating the fishes of North America with special emphasis on local species. Natural history, morphology and function of fishes in relation to man will be studied. Prerequisite: Bio. 122 or equivalent.

26.0603-352—Biomes (S)

A study of the interactions between plants and animals in a variety of habitats. Since an extended field trip comprises a significant portion of this course, travel expenses must be paid by the student during registration. Prerequisite: Bio. 101, 112, 122, and permission of the instructor.

26.0601-361—Parasitology (F, Even)

4 hrs. cr.

A systematic investigation of the numerous parasites which may be found within vertebrates. Life cycles of parasites which infect man will be emphasized. Three lectures and one 3 hr. lab per week. Prerequisite: Bio. 101, 122.

26.0501-362—Virology (F,Odd)

3 hrs. cr.

A study of the origin and evolution of viruses and the diseases that they cause. Molecular aspects of each phase of the virus life cycle within cells will be emphasized. Three lectures per week. Prerequisite: Bio. 211 or 231, and 305.

26.0704-370-Environmental Health (S)

4 hrs. cr.

A course concerned with contemporary environmental health problems and public protection measures. These will include public disease prevention, vector control, ect. Three lectures and one 2 hr. lab per week. Prerequisite: Bio. 211 or 231, Junior standing in science or permission of instructor.

26.0307-371—Plant Physiology

4 hrs. cr.

An introduction to Plant Physiology emphasizing a review of the cell, plant biochemistry, regulation of plant development, and factors producing physiological stress in the plant world. Three lectures and one 2 hr. lab per week. Prerequisite: Bio. 210.

26.0701-381—Ornithology (S,Odd)

3 hrs. cr.

Anatomy, physiology, identification and natural history of birds, with emphasis on local forms. Two lectures and one 2 hr. lab per week. Prerequisite: One introductory course in biology or permission of instructor.

26.0603-402—General Ecology (S)

4 hrs. cr.

A study of plant and animal communities and their interaction within the environment. The flora and fauna of Southwest Missouri will be emphasized. Soils, climate and other major environmental factors responsible for the distribution and association of plants and animals are also considered. Three lectures and one 3 hr. lab per week. Prerequisite: Bio. 101, 112, and 322, or consent of the instructor.

26.0706-431—Animal Physiology (F, Even)

5 hrs. cr.

A comparative and ecological approach to the physiology of animals with emphasis placed on laboratory studies with local species. Three lectures and two 2 hr. labs per week. Prerequisite: 10 hrs. of biology. Bio. 210, 331, and Chem. 300 reommended.

26.0606-433—Histology (S, Even)

4 hrs. cr.

A detailed study of microscopic structure of animal tissues and organs with special emphasis on mammalian tissue. Three lecture and one 3 hr. lab per week. Prerequisite: 10 hours of zoology or consent of the instructor.

26.0706-422—Invertebrate Zoology (F,Odd)

Classication, morphology, physiology, development and evolution of the classes of invertebrate animals. Three lectures and two 2 hr. labs per week. Prerequisite: Bio. 122.

26.9999-450-Practicum in Biology

A course designed to allow students to work at and observe various aspects of an applied biological nature. In conference with a departmental board a half semester in advance, the student shall elect to work and observe in any area of applied biology in which onthe-job experience would be beneficial to the student's training. Pre-requisites: at least a second semester junior standing in Biology with a minimum of 20 Biology hours and 20 senior hours.

26.0704-456—Immunology (S, Even)

3 hrs. cr.

A course for those interested in the health sciences and who wish to know more about the immune mechanism and its role in prevention of disease, hypersensitivity, and transplantation immunity. Three lectures per week. Prerequisites: Bio. 211 or 231 and 305.

26.0604-462—Embryology (S,Odd)

Includes detailed comparisons of developmental process of members of the classes of vertebrates. Three lectures and two 2 hr. labs per week. Prerequisite: Bio. 122 and/or 331.

26.0101-481—Aquatic Biology

4 hrs. cr.

A course concerned with the analysis of components of freshwater systems, both impoundment and stream environments. Prerequisite: Bio. 122 or equivalent.

### 26.9999-490—Seminar (F,S)

1 hr. cr.

A faculty supervised discussion group concerned with reviews and reports covering current topics in the various fields of biology. Faculty members, as well as students, will present reviews in their various areas of interest. One meeting per week. Prerequisites: Primarily for biology majors of Junior standing or interested students with at least 15 hours of biological science.

## 26.9999-498—Seminar in Biology (F,S)

1-3 hrs. cr.

A seminar for upper division majors only. The class will meet regularly a minimum number of hours. The course is designed to give specialized instruction in some discipline of biology not covered in other courses. Prerequisite: Junior standing, 20 hours in biology and a minimum GPA of 2.5 in biology, or permission of the instructor required.

## 26.9999-499—Problems in Biology (F,S)

1-3 hrs. cr.

Consists of individual work under the supervision of a staff member, with the credit and hours to be arranged. Problems may be undertaken in any field of biology, with adequate preparation and the consent of the supervising instructor, department head and school dean. Prerequisite: A minimum GPA of 3.0 in 20 hours of biology.

### GENERAL BUSINESS

### School of Business Administration

Compton; Grim; Honey; Leitle; Miller; Ratliff; Tiede

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

A student may obtain a Bachelor of Science in Business Administration in any of four majors and must complete the following requirements.

A. B. C.	General Education (see page 55) Business Administration (Required Core) Business Major Requirements (Accounting, Economics and Finance, General Business, Marketing Management) Electives	46 hours 39 15-23 24-26 124 hours
A	Rusiness Administration Core Requirements: Acct 201 Principles of Accounting I Acct 202 Principles of Accounting II ACM 401 Promotional Strategy ACM 412 Marketing Management ACM 431 Operations Management ACM Electives in Business and Economics	3 3 6 18 hours
1 [ [	Economics and Finance Major  1) Required: Econ 300 Money and Banking Econ 401 Microeconomic Analysis Econ 402 Macroeconomic Analysis Econ 411 Investments	12 hours

## Errata {Please insert between pages 80 and 81}

### B. Business Administration Core Requirements:

	· ·	
Acct 201 Acct 202 Econ 201 Econ 202 GB 301 GB 320 GB 321 GB 327	Principles of Accounting I Principles of Accounting II Principles of Economics {Macro} Principles of Economics {Micro} Business Law I Business Communications Business Statistics I Managerial Data Processing	mm mmm m mn
MM 300	Principles of Marketing	mmm
MM 350 Econ 350	Principles of Management Financial Management	37
MM 452	Business Policy	Ä

## Required Elective. Choose one from:

*GB 302	Business Law II
**Econ 300	Money and Banking
GB 322 MM 441	Business Statistics II Organizational Behavior

39 hours

\*Accounting majors planning to sit for the CPA examination should take GB 302. Business Law II as a required elective.

\*\*Students majoring in Economics and Finance may not choose Econ 300 money and Banking as a required elective.

### C. Major Requirement:

In addition to the core requirements listed above, the requirements by major are:

### Accounting Major:

Acct		Intermediate Accounting I	ц
Acct		Intermediate Accounting II	4
Acct		Cost Accounting	3
Acct		Advanced Accounting	3
Acct		Tax Accounting	3
Acct		Auditing	3
ACCL	750	Accounting Theory	
-		1	23 hours

### General Business Major:

Requires an additional 15 hours of Business and Economics courses with at least 3 hours selected from each of the following areas:

Accounting
Economics and Finance
Marketing and Management
General Business
Electives in Business



### Marketing and Management Major:

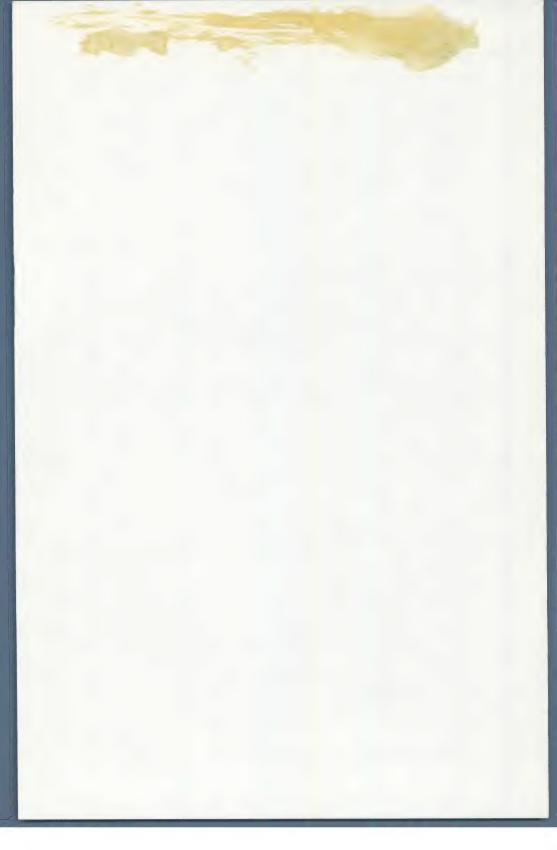
{1}	Four	of	the	following	5	courses	are	required:	12
MM TI	7 77								

		MM MM MM	352 401 412 431	Personnel Management Promotional Strategy Marketing Management Operations Management
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{2}	Electives	in	Business	and	Economics

La hours

Economics and Finance Major: {as is}



2) Plus 6 h	ours from the following:	6
Econ 302 Econ 312 Econ 412 Econ 498 GB 322 Hist 315 Geo 222	Economic Growth and Development Economic Resources Urban and Regional Economics Seminar in Economics and Finance Business Statistics II Economic History of the United States Economic Geography	Ü
		18 hours

## BACHELOR OF SCIENCE DEGREE IN MANAGEMENT-TECHNOLOGY

The Bachelor of Science degree with a major in Management-Technology is a transfer degree program and requires a minimum of an Associate Degree (or equivalent) in an acceptable technological field for admission to the program. The student **must** apply for admission to the program in the first semester of the junior year.

In addition to the General Education requirements for all bachelor degrees (see page 55) the B.S.M.T. degree requires the following courses:

1. Requir	ed core courses for the B.S.M.T.	
Acct 201	Principles of Accounting I	2
Acct 202	Principles of Accounting II	3
GB 301	Business Law I	3
GB 302	Business Law II	3
GB 320	Business Communications	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Econ 201	Principles of Economics (Macro)	3
Econ 202	Principles of Economics (Micro)	3
Econ 350	Financial Management	3
MM 300	Principles of Marketing	3
MM 350	Principles of Management	3
MM 352	Personnel Management	3
771171 332	reisonner Management	3
		33 hours
2. Nine ac	dditional hours to be selected from:	9
Acct 310	Cost Accounting	,
GB 321	Business Statistics I	
GB 337	Managerial Data Processing*	
MM 401	Promotional Strategy	
MM 412	Marketing Management	
MM 431	Operations Management	
MM 452	Business Policy	
		42 hours

<sup>\*</sup>Students obtaining an A.S. in Computer Science may not choose GB 337 as a required elective.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

Business Education as a Single Teaching Field (Plan B)

In addition to General Education requirements (see page 55) and the Professional Education requirements of the School of Education (see page 106) the Bachelor of Science in Education degree with Business Education as a single teaching field consists of 42 semester hours.

OA 102* OA 200* OA 120* OA 220* Acct 201 Acct 202	Typewriting II Typewriting III Intermediate Shorthand Dictation & Transcription Principles of Accounting I Principles of Accounting II	3 3 3 3 3 3
Accounting	. Choose one:	3
Acct 312	Intermediate Accounting I	
Acct 310	Cost Accounting	
Acct 401	Tax Accounting	3
GB 337	Managerial Data Processing	3
Econ 201	Principles of Economics (Macro) Business Communications	3
GB 320 GB 301	Business Law I	3 3 3 3 3
OA 250	Introduction to Word Processing	3
GB 312	Principles of Business Education	3
MM 350	Principles of Management	
Recommer	nded Electives (but not required)	
OA 230	Secretarial Procedures	
GB 115	Business Math/Calculators	
OA 231	Secretarial Machines	42 hours
		42 Hours

\*Students having proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses in order to meet the 42 hour requirement.

The Bachelor of Science in Education degree with Business Education as one of two teaching fields (Plan A) consists of 33 semester hours.

OA 102* OA 200* OA 120* OA 220* Acct 201 Acct 202	Typewriting II Typewriting III Intermediate Shorthand Dictation & Transcription Principles of Accounting I Principles of Accounting II	3 3 3 3 3
A	Calact and	3
Accounting Acct 312	. Select one: Intermediate Accounting I	
	Cost Accounting	
Acct 310	Tax Accounting	
Acct 401		3
Econ 201	Principles of Economics (Macro)	3 3 3
GB 320	Business Communications	3
GB 301	Business Law I	3
GB 337	Managerial Data Processing	9
Recommen	nded Electives (but not required)	
GB 115	Business Math/Calculators	
OA 231	Secretarial Machines	
OA 250	Intermediate to Word Processing	
O/1 250		33 hou

\*Students having proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses to meet the 30 hours requirement.

## ASSOCIATE OF SCIENCE DEGREE

The School of Business Administration offers two-year programs leading to the Associate of Science degree in Accounting, General Business, and Secretarial Science.

## 1. Associate of Science in Accounting

The curriculum prepares students to enter public accounting firms, industry, banking, and government service as accounting assistants, Junior accountants or accounting clerks. The degree requires completion of:

a. General Edu	ucation (see page 57)	24 hours
b. GB 320	Business Communications	24 nours
GB 115	Business Math/Calculators	3
Acct 201	Principles of Accounting I	3
Acct 202	Principles of Accounting II	3
Acct 312	Intermediate Accounting I	3
Econ 201	Principles of Economics (14	3
Econ 202	Principles of Economics (Macro)	3
OA 102	Principles of Economics (Micro)	3
or or	Typewriting II	3
OA 200	Typewriting III	3
Acct 310	Cost Accounting	3
MM 350	Principles of Management	3
GB 301	Business Law I	3
Acct 401	Tax Accounting	3
c. Electives.		3
c. Licetives.	Should be selected from Business Law II, Auditing, or Business Statistics I.	3

## 2. Associate of Science in General Business

This program provides the student with the necessary background, knowledge, and skills that are needed to enter the business world at the first-level supervisory position or as owner-operators of a private business. The degree requires the completion of:

a. General Edu	cation (see page 57)	24 hours
b. GB 115	Business Math/Calculators	24 nours
Acct 201	Principles of Accounting I	3
Acct 202	Principles of Accounting II	3
Econ 201	Principles of Economics (Macro)	3
Econ 202	Principles of Economics (Micro)	3
GB 301	Business Law I	3
GB 302	Business Law II	3
MM 300	Principles of Marketing	3
MM 350	Principles of Marketing	3
Electives:	Principles of Management	3
Liectives.	Selected electives from the business areas of	11
	personnel management, promotional strategy,	
	retailing, salesmanship, and business	
	communications. Selections from psychology	
	and computer science are also valid with	
	approval from advisor.	

## 3. Associate of Science in Secretarial Science

The secretarial science program prepares the student for the position of professional secretary. The degree requires completion of:

	General Educ Acct 201 GB 320 GB 301 OA 200 OA 220 OA 230 OA 231 OA 240 OA 250 Electives:	Principles of Accounting I Business Law I Business Communications Typewriting III Dictation and Transcription Secretarial Procedures Secretarial Machines Records Management Introduction to Word Processing Electives may include prerequisite courses to OA 200 and OA 220 if needed. Others should be selected from Principles of Management, Accounting, Economics, General Psychology, Business Math, Introduction to Data Processing	24 3 3 3 3 3 3 3 3 3 12	hours
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## CERTIFICATE OF ACHIEVEMENT

## Secretarial Typist

A one-year secretarial certificate program that provides students with training essential to obtaining employment as a secretarial-typist. Successful completion of the required curriculum entitles the student to a Certificate of Achievement. The certificate requires the completion of:

OA 120 OA 102 GB 115 Acct 201 Eng 101 GB 320 OA 200 OA 220	Intermediate Shorthand Typewriting II Business Mathematics/Calculators Principles of Accounting I Composition Business Communications Typewriting III Dictation and Transcription	3 3 3 3 3 3 3 3
	Dictation and Transcription Secretarial Machines Communications	3 3 3

## 06.0101-101—Introduction to Business (F,S,) 3 hrs. cr.

An introductory course in modern American business, including a study of the capitalistic system, ownership and organization, management problems, marketing, finance, law and taxation.

## 06.0101-115—Business Mathematics/Calculators (F,S) 3 hrs. cr.

A review of the fundamental processes of mathematics as applied to business. It also includes common and decimal fractions, percentages, markup, interest, bank discount, compound interest, annuities, insurance, payrolls, taxes, and financial statements. It should be taken concurrently with or precede accounting. Students learn how to use modern electronic calculators on the solution of business mathematics problems.

## 06.0101-301—Business Law I (F,S) 3 hrs. cr.

A study of Common law principles and statutes, particularly the Uniform Commercial Code, as they relate to American business. The course includes a study of the court

systems and procedures, contracts, personal property and bailments, sales, and commercial paper. Special emphasis is placed on Missouri case-law and statutes. Lectures are supported by actual case descisions and case digests. Prerequisite: Jr. Standing.

06.0101-302-Business Law II (F,S)

3 hrs. cr.

A study of Common law principles and statutes, particularly the Uniform Commercial Code, as they relate to American business. The course includes a brief overview of Criminal Law and Tort Law, Government Control and Regulation, Secured Transactions, Insurance, Bankruptcy, Agency and Employment, Partnerships, Corporations, Real Property and Estates. Prerequisite: Jr. Standing.

06.0101-312-Principles of Business Education (See page 106) 3 hrs. cr.

06.0101-320—Business Communications (F,S)

3 hrs. cr.

The study of communication through sound written and oral business messages. Includes principles, functions, techniques, and format of writing effective letters, memos, and reports with emphasis on the application process. (Prerequisites: 6 hrs. English Composition or consent of instructor.)

06.1301-321—Business Statistics I (F,S)

3 hrs. cr.

Business Statistics I is the introduction to the basic concepts of descriptive and inferential statistics and to the methods of statistical analysis as they apply to business decision making. Topics studied include: frequency distribution; measures of central tendencies and dispersion; sample regression and correlation analysis; time series and seasonal analysis; probability concepts; sampling distributions; and estimation procedures. Prerequisite: Math 130, 131 or higher.

06.1301-322—Business Statistics II (S)

3 hrs. cr.

A study of methods of statistical analysis relating to business decision making and research in business and economics. Covers sampling theory, parametric test of hypotheses, analysis of variance, nonparametric test of hypotheses, statistical quality control, decision making under uncertainty, index numbers, and other selected statistical techniques. Prerequisite: Business Statistics I.

06.1201-337—Managerial Data Processing (F,S)

3 hrs. cr.

Study of the application of automatic information processing to business, the media for recording, processing, and controlling of business information by the automatic process, and the formats and flow of data through electronic computers with simulated problems applicable to areas of Accounting, Management, and Marketing. Prerequisite: Junior standing in Business Administration and MM 350.

06.0201-401—Tax Accounting (See Accounting 401) (F,S)

3 hrs. cr.

06.1801-410—Small Business Management Practicum (F,S) 3 hrs. cr.

A practical course designed to provide students experience in solving real problems in an actual business environment. Students provide counseling to small business firms through cases referred by the Small Business Administration. Course may be repeated to a total of six hours of credit. Prerequisite: Second semester Junior or Senior standing in Business Administration and permission of the instructor. Application for admission to the course is required.

06.0101-411-Labor Law (demand)

3 hrs. cr.

A study of significant legislation and the accompanying case decisions which have a major impact on labor/management relations. The primary emphasis of the course is on the Labor-Management Relations Act, as amended, with special attention being given to establishment of the bargaining unit and unfair labor practices on the part of both labor and management. Secondary emphasis is on Fair Employment practices. Prerequisite: Jr. Standing.

06.0101-498-Seminar in General Business (demand)

A seminar for upper division general business or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission. Examples of seminars offered in the past are:

498-Seminar in Office Machines

498-Seminar in Career Orientation

498-Seminar in Consumer Behavior

06.0101-499-Independent Study in General Business (demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of general business for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission and 3.00 G.P.A.

### CHEMISTRY

### School of Arts and Sciences Department of Physical Science

Baiamonte, Department Head; Albright; Bishara; Kash; Malzahn; Mosher; Whittle

Degrees prepare students for: graduate school, professional schools, high

school teaching, chemists in industrial laboratories.

Requirements for a major in chemistry for the Bachelor of Arts degree are 28 semester hours in chemistry including Chem. 101, 102, 201, either Chem. 300 plus 8 upper division semester hours in chemistry (excluding Chem. 301) or Chem. 301 and 302 plus 3 upper division semester hours in chemistry (excluding Chem. 300). Additional requirements are 8 semester hours in physics including Phys. 151 and 152, and 5 semester hours in mathematics including Math 140 or 150. A Bachelor of Arts degree is for students who desire some knowledge of chemistry as a basis for work in other fields, but who do not expect to become professional chemists.

Requirements for a major in chemistry for the Bachelor of Science degree are 33 semester hours in Chemistry including Chem. 101, 102, 201, 301, 302, 401, and 402. Additional requirements are 11 semester hours in physics including Phys. 201, 202, 203, and 10 semester hours in mathematics including

Math 150 and 250.

Requirements for a major in chemistry for the Bachelor of Science in Education degree with chemistry as one of two teaching fields (Plan A) are 27 semester hours in chemistry including Chem. 101, 102, 201, 301, 302, and 499 (2 hrs.). Additional requirements are 5 semester hours in physics including Phys. 151, 4 semester hours in biology including Bio. 110, and 5 semester hours in mathematics including Math 140 or 150. See page 106 for teacher education requirements.

Requirements for a major in chemistry for the Bachelor of Science in Education degree with chemistry as the only teaching field (Plan B) are 31 semester hours in chemistry including Chem. 101, 102, 201, 301, 302, 401 and 499 (2) hrs.). Additional requirements are 11 semester hours in physics including Phys. 201, 202, and 203, 4 semester hours in biology including Bio. 110, and 10 semester hours in mathematics including Math 150 and 250. See page 106 for

teacher education requirements. General Education requirements can be met with any 5 semester hour chem-

istry course.

40.0501-100—Introductory Chemistry (F,S)

5 hrs. cr.

The basic principles and practical application of inorganic, organic and biochemistry which satisfies either the general education science requirement or the needs of students in certain health-related programs. Three lectures, one 3-hour laboratory, and one recitation session per week. Prerequisite: Math 30 or satisfactory score on the Mathematics Placement Test.

40.0501-101—General Chemistry I (F,S)

5 hrs. cr.

Introduction to theories of chemistry with emphasis on the relationship of structure to properties of matter and the quantitative aspect of these changes. Three lectures, one 3-hour laboratory, and one recitation session per week. Prerequisite or corequisite: Math 140 or higher level math course.

40.0501-102—General Chemistry II (F,S)

5 hrs. cr.

A continuation of Chem. 101. Emphasis on the dynamics and thermodynamics of chemical processes and on the properties and reactions of analogous groups of cations and anions. Three lectures, one 3-hour laboratory, and one recitation session per week. Prerequisites: Chem. 101 with a minimum grade of C or permission of instructor and Math 140 or higher level math course.

40.0502-201—Analytical Chemistry I (F)

5 hrs. cr.

The standard first course in quantitative chemical analysis. The lecture and laboratory include volumetric, gravimetric, potentiometric and spectrophotometric methods of analysis. The emphasis in this course is on the interpretation of experimental data. This course, when followed by Chem. 421, constitutes a year's sequence in analytical chemistry. Three lecture and two 3-hour laboratories per week. Prerequisite: Chem. 102.

40.0599-298—Selected Topics in Chemistry (F,S)

1-3 hrs. cr.

Study of special topics in chemistry not normally included in other courses. Prerequisite: Chem. 201 or permission of instructor.

40.0504-300—Introduction to Modern Organic Chemistry (S) 5 hrs. cr.

The basic principles of organic chemistry—nomenclature, structure, properties, stereochemistry, reactions—will be studied by the functional group approach. Designed for students who require a general knowledge of organic chemistry in their chosen career or as background for other courses in technical or professional training programs. Three lectures, one 3-hour laboratory, and one recitation session per week. Prerequisite: Chem. 102.

40.0504-301—Organic Chemistry I (F)

5 hrs. cr.

Deals with both aliphatic and aromatic compounds, their nomenclature, properties, reactions and stereochemistry. The functional group approach is used: hydrocarbons (saturated, unsaturated, aromatic) and their derivatives are studied. A brief introduction to organic spectroscopy is included in this course. Three lectures, one 3-hour laboratory, and one recitation session per week. Prerequisite: Chem. 102.

40.0504-302—Organic Chemistry II (S)

5 hrs. cr.

A continuation of Chem. 301. The functional group approach is continued: Alcohols, aldehydes and ketones, carboxylic acids, amines and polyfunctional compounds are covered. A mechanistic treatment of substitution, elimination, addition, and free radical reactions is employed. Organic spectroscopy is emphasized in lecture and laboratory. Three lectures, one 3-hour laboratory, and one recitation session per week. Prerequisite: Chem. 301.

26.0201-351—Biochemistry (F)

4 hrs. cr.

Fundamental concepts of the chemistry of lipids, carbohydrates, and proteins with emphasis on the physiological aspects of these compounds. The interrelationship of these

compounds in living systems will be presented through bioenergetics and reaction pathways. Three lectures and one 3-hour laboratory per week. Prerequisite: Chem. 300 or 302.

40.0506-401-Physical Chemistry I (F,Odd)

4 hrs. cr.

The laws of thermodynamics are developed and are then used to explain the relationships between properties of systems at equilibrium. The ideas of thermodynamics are first applied to equilibria between different phases and then to chemical reactions. Three lectures and one 3-hour laboratory per week. Prerequisites: Math 250 and Phys. 203.

40.0506-402-Physical Chemistry II (S, Even)

4 hrs. cr.

A continuation of Chem. 401. A microscopic approach to the understanding of chemical and physical properties of chemical systems and a study of the rates at which chemical and physical processes occur. Studies of: quantum theory, molecular electronic structure, molecular spectroscopy, statistical mechanics, kinetic theory of gases, and chemical kinetics are included. Three lectures and one 3-hour laboratory per week. Prerequisite: Chem. 401.

40.0502-421—Analytical Chemistry II (S)

5 hrs. cr.

A study of the overall analytical process. The lecture and laboratory deal mainly with electrochemical and spectrophotometric methods of analysis and their application in chemical analysis but also include other physiochemical and separatory techniques used in modern analytical processes. Three lectures and two 3-hour laboratories per week. Prerequisite: Chem. 201.

40.0503-422—Advanced Inorganic Chemistry (F, Even)

4 hrs. cr.

Modern inorganic chemistry with emphasis upon coordination complexes, periodic classification of the non-transitional and transitional elements. Three lectures and one 3-hour laboratory per week. Prerequisites: Chem. 102 and Math 250.

40.0509-472—Organic Qualitative Analysis (S,Odd)

4 hrs. cr.

Systematic identification of organic compounds and mixtures. Two lectures and two 3-hour laboratories per week. Prerequisite: Chem 302.

40.0599-498—Seminar (F,S)

1-3 hrs. cr.

A seminar for upper division chemistry majors. The content of the course, depending on the student's needs, will vary from library research to special topics in chemistry. Prerequisite: senior standing or permission of the department head.

40.0599-499—Independent Study (F,S)

1-3 hrs. cr.

Independent investigation techniques; includes a paper upon a selected topic with both a critical survey or the chemical literature and results from advanced laboratory experimentation. Open to student having (1) a minimum of 15 hours of chemistry, (2) the ability to undertake independent work, and (3) permission of the instructor. Registration must be approved by the advisor, department head, and school dean.

## COMMUNICATIONS

### School of Arts and Sciences

Massa, Department Head; Balhorn; Bodon; Carney; Kluthe; Finton; Merriam; Peterson; Short

The Department of Communications includes many of those interrelated academic disciplines and skills which have to do with the theory and practice of human communication. Course offerings and degree programs are designed to help students learn to communicate and receive ideas, facts, and feelings

effectively and creatively in English and languages other than English. (See also course listings under Foreign Languages.) Employment in public relations, personnel, sales, speech writing, on the staffs of newspapers and broadcasting stations, and in government service are among the opportunities available for graduates of the Department of Communications. Preparation for teaching and for graduate study is given also.

A major in communications for the Bachelor of Arts degree is offered with two options: Speech communication and Public Communications. The requirement for each option includes both a common core of 12 semester hours made up of Comm. 100, 101, 120 and 215 and 3 semester hours of a foreign language

beyond that required for the Bachelor of Arts degree.

For Option 1, Speech Communication, additional requirements are 35 semester hours. Included are Comm. 131, 300, 411, 20 semester hours of communication electives of which six must be upper division, and six upper division hours in a discipline aligned to the career goal of the individual student.

For Option 2, Public Communications, additional requirements are 35 semester hours. Included are Comm. 310, 345 and 24 semester hours of communication electives which must include at least 1 upper division semester hour. All 24 hours of electives must be chosen with prior written approval by an advisor in communications. It is recommended that electives outside of communication be chosen from upper division courses in history, political

science, sociology, business and psychology.

Requirements for a major in speech communication and theatre for the Bachelor of Science in Education degree with speech communication and theatre as the only teaching field (plan B) are 44 semester hours in speech communication and theatre. Included are Comm. 215 or 304, 212, 315 and 2 semester hours of forensic workshop; Th. 142, 331, 332, 351, and 2 semester hours of theatre laboratory; and 19 semester hours of additional courses in speech communication and/or theatre. The 19 hours must be approved in advance by the student's advisor who must be selected from either the area of speech communication or theatre. See page 106 for teacher education requirements.

The education major who desires state certification in journalism must have certification in another secondary teaching field and must have 21 hours in the following courses: Comm. 111, 120, 233, 310, 302, 312, and 220 for 3 semester hours. It is recommended that news media experience be included in

the student's program as an addition on a credit or non-credit basis.

Students who seek admission to a professional school of journalism in their junior year should consult with the head of the Department of Communications. Such students should be familiar with the latest entrance requirements of the school to which they intend to apply. Generally a student will be required to have 60 hours of classes with a 3.0 grade point average. Required will be a minimum of 13 hours in one foreign language, courses in biological and physical sciences, mathematics, sociology, psychology, economics, history, political science, literature, philosophy, art or music appreciation, and a course in exposition beyond the freshman composition requirements. Applications for admission to a school of journalism are normally made by February 15, and summer enrollment is advised.

Comm. 100, is a prerequisite to all speech communication courses except

Comm. 103 and 131.

General education requirements in speech may be met by any one of the following courses: Comm. 100, 103, or 131.

09.0101-100—Oral Communication (F,S)

3 hrs. cr.

Fundamental principles of oral communication; designed to improve self-expression through the development of organizational abilities and skilled delivery. Emphasis is on the spoken word. (Meets general education requirements.)

09.0101-101—Introduction to Human Communication (F) 3 hrs. cr.

Basic survey of the scientific approaches to human symbolic exchange. Preparation for entering the field of communications. (Will not meet general education requirements.)

09.0101-103—Business and Professional Speech (F,S) 3 hrs. cr.

A performance-oriented course designed to foster ability in and understanding of the role of speech communication in the context of business organizations and the professions. Interviewing, group discussion, and individual speaking formats are included. (Meets general education requirements and is recommended for business and management majors.)

09.0401-111—Newswriting (F)

3 hrs. cr.

Development of techniques in reporting and writing for a newspaper. Editing, copy reading, and proofreading. Work on the college newspaper, **The Chart**, is required.

09.0401-120—Mass Communications Theory (S) 3 hrs. cr.

Principles, history and development of the media and their role in political, social, and economic life of the present.

23.1001-121, 321—Forensics Workshop (F,S) (Per sem.) 1 hr. cr.

A practicum in the area of forensics, including research, organization, and presentation of the current debate proposition along with development and presentation of individual events. Each course may be repeated for a maximum of 4 hours of credit.

09.0701-130—Introduction to Broadcasting (S) 3 hrs. cr.

The role of the electronic media in our society and an introduction to the varied aspects and functions of the broadcasting profession. Laboratory experience in television.

23.1001-131—Voice and Articulation (F,S) 3 hrs. cr.

Techniques for improving the speaking voice. Attention to phonetics, articulation, pronunciation, and general expression. (Meets general education requirements and is recommended for education majors.)

09.0701-200—Radio Production (F) 4 hrs. cr.

Development of announcing skills. Exercises in microphone techniques. Introduction to control board. Basic production techniques. Development of radio station's staff requirements and responsibilities. Introduction to programming and formats. Project programs are taped for analysis. Two hours of lectures, four hours of laboratory per week. Prerequisite: Comm. 130.

09.0701-201—Television Production (S) 4 hrs. cr.

Intensive practice in preparation and production of television programs. Camera techniques, floor set-ups, and direction of crews and talent. Interviewing techniques. Development of varied "on-the-air" skills. Two hours of lectures, four hours of laboratory per week. Prerequisite: Comm. 200.

23.1001-212—Oral Interpretation (S)

3 hrs. cr.

Introduction to oral interpretation of literature; preparation and reading of poetry, prose, and drama; analysis of literature; practice in phrasing, vocal quality, time, force, pitch, and bodily responses.

09.0101-215—Interpersonal Communication (F) 3 hrs. cr.

Person-to-person communication with emphasis on dyadic and group communication. Lecture, reading, and discussion with class experiments designed to illustrate interpersonal communication problems. Prerequisite: Oral Communication (Comm. 100) or Voice and Articulation (Comm. 131.)

09.0401-220-Practical Journalism (F,S)

(Per sem.) 1 hr. cr.

Laboratory experience on the staff of the college newspaper or the college yearbook. Intensive participation in reporting, editing, make-up, and paste-up. Students must participate fully in the work of the publication. One hour of credit each term for maximum of three terms. Prerequisite: Comm. 111 or consent of instructor.

09.0401-231—Feature Writing (demand)

3 hrs. cr.

Investigative reports and special articles for newspapers and magazines. Work on the college newspaper is required. Prerequisite: Comm. 111 or consent of instructor.

09.0401-233—Editing and Editorial Writing (F, Even)

3 hrs. cr

Principles of copy reading and editing, design of newspaper. Paste-up techniques. Students work in positions of major responsibilities on the college newspaper, **The Chart**. Prerequisite: Comm. 111.

**09.0101-298—Selected Topics in Communications (demand) 1-8 hrs. cr.** Each offering is in a topic not normally included in another course. Prerequisites are determined by the department and stipulated in syllabus.

23.1001-300—Organizational Communication(F,Odd)

3 hrs. cr.

The interface between communication theory and organizational structure. Emphasis upon communication problems in organizations, strategies for overcoming such problems and the design of effective communication systems in organizational settings.

09.0701-301-Broadcast and Cable Management (S)

3 hrs. cr.

Broadcast station administration, market analysis, policy determination, station organization, sales, programming, network relationships, community involvement, and FCC responsibilities.

09.0401-302—Photocommunications (demand)

3 hrs. cr.

Theory and practice of communication through the media of photography. Students work on the photography staffs of college publications and deal with the application of photography to the mass media. Prerequisite: Comm. 111 and a knowledge of photographic techniques, including developing and printing.

09.0101-304—Small Group Communication (F, Even)

3 hrs. cr.

The structure and function of small groups in discussion, problem-solving, and decision making. Emphasis on criteria necessary for group effectiveness, understanding roles, leadership, and participation.

09.0401-310—Communication Law (S, Even)

3 hrs. cr.

Statutes, administrative regulations, and court decisions affecting freedom of information, censorship, libel, privacy, contempt of court, obscenity, legal access, copyright, advertising, and broadcasting. Rights, privileges, and obligations of the press.

09.0401-312—Scholastic Publications (demand)

3 hrs. cr.

Editorial and production practices of school newspapers and yearbooks. The role of the publications advisor. Advanced publication work on the college newspaper or yearbook. Prerequisite: 12 hours in media courses.

23.1001-315—Argumentation and Debate (F, Even)

3 hrs. cr.

The theory of the modern forms of evidence, evaluations, arguments, methods of refutation, and ethical relationships of these methods in a free society. (Meets certification requirements for secondary education.)

09.0601-325—Broadcast News Reporting (F)

3 hrs. cr.

Experience in writing and reporting news for broadcast. Interview assignments, wire rewriting, actualities/voice production, and newstape editing. Prerequisite: Comm. 111.

09.0101-345—Internship in Communications (Summer) 8 hrs. cr.

Work experience in areas related to professional goals of students. For advanced majors in communications. Students must be approved for the program prior to enrolling. The student works under joint supervision of a faculty member and a representative of the organization providing the intern experience. Prerequisite: Communications major and approval of the department head.

09.0101-411—Political and Social Communication (S, Even) 3 hrs. cr.

A critical analysis of speakers and speeches selected to present the characteristic ideas of leading social and political developments in national and international affairs; includes lecture, reading, and discussion.

09.0101-493—International Communication (S,Odd) 3 hrs. co

Analyysis of factors influencing communication across cultural and national boundaries. Topics include language diversity, value and perceptual differences, nonverbal symbols, ethnocentrism, international broadcasting, media imperialism, and the "New World Information Order."

**09.0101-498—Seminar in Speech Communication (demand)** 3 hrs. cr. For upper-division students. Topics to be announced each time the course is offered.

09.0101-498—Seminar in Public Communication (demand) 1-3 hrs. cr.

For upper-division students. Topics to be announced each time the course is offered. Prerequisite: Senior standing and at least 15 hours of communications courses. Juniors may enroll with permission of instructor.

09.0401-499—Independent Study in Speech Communication (F.S)

1-3 hrs. cr.

An independent course structured by the advisor with approval of the department head and school dean. Prerequisite: Advanced standing in the major field with a grade point average of 3.0 or approval of department head. Registration must be approved by advisor, department head and school dean.

09.0401-499—Independent Study in Public Communication (demand)

1-3 hrs. cr.

Individually directed study in selected areas for advanced majors in communication. Prerequisite: A grade point average of 3.0 in the major field and 15 hours of communications. Registration must be approved by the advisor, department head and school dean.

### COMPUTER SCIENCE

### School of Technology

Cragin; Calicott; Earney; Gray; Mays

Three Associate of Science (AS) degrees have the goals of preparing the student for entry-level employment in business, industry, or government in the general field of computing. All three of these two-year programs require 24 hours of general education (See page 57); some of these requirements may be met by the "General Education" recommendations indicated below.

1. Computer Programming (oriented toward business applications programming).

A. General Education Recommendations:

24 cr. hrs.

Math 131 Finite Math Comm 103 Bus/Prof'l Sp

## **COMPUTER SCIENCE**

В	3. Computer Core:	21 cr. hrs.
	Comp 100 Intro to DP Comp 120 Intro to Prog Comp 240 Stat Comp App'ns Comp 250 Prin Dig'l Comp Comp 302 Syst Concepts	
	Comp 110, 130, 230, 234	ielect 2
C	. Business Core: Acct 201 Elem Acct I	18 cr. hrs.
	Acct 202 Elem Acct II Acct 310, 312, 401	elect 2
	2. Computing Analysis (oriented toward Science/Engineeringramming).	ng Pro-
Α.	General Education Recommendations: Comm 103 Bus/Prof/LSp	24 cr. hrs.
	Gen'l Ed'n Math and Natural Sci. are satisfied in "2.c", below included in 24 cr. hrs., this paragraph.	; hours
В.	Computer Core: Comp 120 Intro to Prog CIS 340 Analog Sim Tech Comp 240 Stat Comp App'ns Comp 250 Prin Dig Comp Comp 230, 234	15 cr. hrs.
C	Mathematics/Science Core;	27 cr. hrs.
	of a total of 35 hours in this area 8 cr. hrs. were included i "2.A." above.  Math 150 Calc I Math 250 Calc II Math 260 Calc III Math 322 Diff Eq Math 310, 361 Se Math 350, 431 Se Phys 201 Gen Phys I Phys 202 Gen Phys II Phys 203 Gen Phys III	n para
	3. Electronic Data Processing (Oriented toward the Office	ce/DP
A.	Shop Environment). General Education Recommendations: Math 131 Finite Math	24 cr. hrs.
B.	Computer Core: Comp 100 Intro to DP Comp 110 Data Entry Comp 120 Intro to Prog Comp 130, 230, 234, 302	15 cr. hrs.

C. Business Core:

24 cr. hrs.

Econ 202 Micro Econ Acct 201 Elem Acct I Acct 202 Elem Acct II GB 321 Bus Stat I OA 250 Word Proc OA XXX, GB XXX, MM XXX .....Select 3

(With Adviser approval.)

A certificate is given at the conclusion of a special one-year program. This program requires the completion of at least 30 hours of which the following shall be a part:

Eng 101 Fresh Comp

Math 131 Finite Math (or Math 130 or higher)

Comp 120 Intro to Prog

Comp 110, 230, 234, 240 ...... Select 2

1 Add'l 3-hour course from Gen'l Ed

2 Add'l 3-hour courses from student's area of interest, e.s., Business,

Computer/Information Science, Mathematics, etc.

6 credit hours of electives

11.0101-100—Introduction to Data Processing (F,S)

3 hrs. cr.

Illustrates the use of the computer in facilitating the processing of information used by society in our daily lives. Looks at the hardware and software components of computer systems and how they work together. Introduction to the number systems. Basic problem analysis and logical block diagramming. Familiarization with higher-level programming. 3 hours lecture per week.

07.0303-110-Data Entry Operations (F,S)

3 hrs. cr.

The data entry function and its relationship to the data processing organization and system. Machine operation, keyboard skills, and the production process in data entry preparation and verification on keypunch, diskette and direct data equipment. Text editing and error correction using visual display terminals. Three one-hour periods of combined lecture and lab per week.

11.0201-120—Introduction to Programming (F,S)

An introduction to digital computer programming which includes basic operating principles. Number systems and codes, arithmetic operations, computer logic and program control constructs, flowcharts, and FORTRAN syntax. A number of programming exercises from various elementary applications areas will be required. Three hours of classroom lecture per week plus appropriate laboratory time (open lab is available at student's convenience). Prerequisites: Math 130 or 131 or higher and Comp 100 or consent of the instructor.

11.0201-130—Elementary Programming (F,S)

3 hrs. cr.

This introductory course uses a popular programming language, BASIC. Familiarization with various computer language dialects particularly those of the popular microcomputers is a goal. Basic principles, numbering systems, arithmetic operations, coding systems, computer logic, and programming functions will be developed. Lecture three hours per week plus appropriate laboratory time (open lab is available at student's convenience). Prerequisite: Math 130, 131, or higher math course.

11.0201-230—Advanced Programming (F,S)

Functions and capabilities of digital computers. Special techniques and methods essential to becoming a programmer. Includes systems and applications using the RPG language. Three one-hour lectures with open labs as required. Prerequisite: 11.0301-120 (Intro. to Programming).

11.0201-234—Business Data Processing Techniques (F)

3 hrs. cr.

Methods and techniques of solving business related problems using a business oriented language (COBOL) on a digital computer, including payroll systems, inventory control, billing systems, sorting techniques, and file maintenance. Three one-hour lectures per week with open labs to complete assignments. Prerequisite: COMP 120 or COMP 130 (Intro. to Programming or Elementary Programming).

11.0201-240—Statistical Computer Applications (F,S) 3 hrs. cr.

A continuation of programming technique development (FORTRAN). Principles presented in previous courses will be employed in this course. Emphasis will be placed on non-routine types of applications, including quality control, statistics, curve fitting, forecasting etc. Three one hour lectures per week; open laboratories as required. Prerequisite: COMP. 120 (Intro. to Programming).

11.0401-250—Principles of Digital Computing Machines (F,S) 3 hrs. cr.

Provides the necessary foundation for the continuing study of computing machines. Includes the concepts of notation, binary system, systems conversion, representation of a number with an arbitrary base, fixed and floating point numbers, precisions, switching circuits, Boolean algebra, micro, machine, and assembler programming and other discrete mathematical topics. Three one-hour lectures per week; laboratories by arrangement. Prerequisite: Comp. 120 (Intro. to Programming).

**07.0305-298—Selected Topics in Computer Science (demand) 1-8 hrs. cr.**Study of special topics in Computer Science. Each offering of a course will be on a special topic or topics not normally included in another course. Prerequisites will be specified by the department in a syllabus.

11.0501-302—Systems Concepts and Implications (S) 3 hrs. cr.

The purpose of the class is to introduce information analysis and system design, basic concepts of system and business management milieu. Topics include: Definition of a System; History of computer industry; Study of management systems, Management Information System, the effects on organizational practice. Effects on the privacy and the quality of life. Three one-hour lectures/week; open labs as required. Prerequisites: Comp. 230 or higher.

#### COMPUTER AND INFORMATION SCIENCE

### School of Technology

Cragin; Calicott; Gray; Mays; Earney

The increasing use of computers in Business, Government, Science, Industry, and the home has created a broad spectrum of opportunities for employment, service, or personal use of computing machines and techniques.

#### IMPORTANT NOTICE

As of the time of publication of this catalog, the CIS B.S. degree program had not been approved by the State Coordinating Board for Higher Education. If approval is granted by Spring "83, the junior level course work will commence in the Fall "83 term. Persons who are interested in this program should check with a CIS faculty member (Campus phone 224) as to the status of the program.

# Bachelor of Science in Computer/Information Science

<ul> <li>A. The student may earn this B.S. degree, in either completing the following requirements:</li> <li>1. General Education (See Academic Regulations)</li> <li>2. Comp/Info Sci (CIS) Core (See below)</li> <li>3. Professional concentration (See below)</li> <li>4. Electives</li> </ul>	of two options, by 46-48 cr. hrs. 30-33 cr. hrs. 27-35 cr. hrs. 9-18 cr. hrs.
<ul> <li>B. CIS Core Requirements:</li> <li>1. Comp. XXX Four Programming Courses</li> <li>2. Comp. 240 Statistical Computer Applications</li> <li>3. CIS 320 Operations Modeling</li> <li>4. CIS 350 Program Structure &amp; Techniques</li> <li>5. CIS 450 Computerware</li> <li>6. If Professional Concentration is in the: <ul> <li>a. Business Option:</li> </ul> </li> </ul>	12 3 3 3 3
(1) Comp. 302 Systems Concepts & Implications (2) CIS 410 Information Systems Analysis (3) CIS 420 Systems Design & Implementation b. Science/Mathematics Option:	3 3 3
<ul><li>(1) CIS 330 Assembler Language Programming</li><li>(2) CIS 460 Compilers</li></ul>	3 3
C. Professional Concentration:  1. Business Option:  a. Prescribed (15 cr. hrs.)  (1) Acct 201 and 202 Elem Acct (2) Acct 310 Cost (or higher) (3) MM 350 Prin of Mgmt (4) MM 441 Org'l Behavior	6 3 3 3
b. Electives from one of the following areas (12 cr. (1) Accounting (2) Economics and Finance (3) Marketing and Management 2. Science/Mathematics Option: a.Prescribed (24 cr. hrs.) (1) Math 150 Calculus W/Analytic Geom I (2) Math 250 Calculus W/Analytic Geom II (3) Math 260 Calculus W/Analytic Geom III (4) Math 350 Numerical Analysis (5) Phys 201 General Physics I (6) Phys 202 General Physics II (7) Phys 203 General Physics III b. Electives from one of the following areas (12 cr. (1) Mathematics	5 5 5 3 4 3 4
<ul> <li>(2) Physics</li> <li>(3) Chemistry</li> <li>(4) Psychology (Physiology 306 may be substitute 202 and 203).</li> <li>(5) Biology</li> </ul>	ed for Phys

### COMPUTER AND INFORMATION SCIENCE

11.0401-320—Operations Modeling (F)

3 hrs. cr.

Introduces analytical and simulation techniques used in making decisions and designing systems; use of software packages will be emphasized. Covers typical cases, e.g. scheduling, queueing, linear programming, inventory, and allocation. Three one-hour lectures/week open labs as required. Prerequisites: Math 310 or GB 321, and Comp. 120 or 130: Upper Division standing or consent of instructor.

11.0201-330—Assembler Language Programming (F)

3 hrs. cr

An introduction to a computer's machine level programming. Topics will include: an introduction to assembler language format, decimal and integer arithmetic, binary arithmetic, instruction sets which includes; translation, editing and execution instructions. Also debugging program construction will be applied. Numerous problems will be worked using basic assembler language. Three one-hour lectures/week; open labs as required. Prerequisites: Comp. 120 or Comp. 130 and one 200-level programming class.

11.9999-340—Analog Methods and Simulation Techniques (demand)

3 hrs. cr.

Introduces methods and techniques for solving systems of simultaneous differential equations on electronic analog computers, and digital computers. Emphasizes analog methods of modeling physical, biological and social systems; especially appropriate for pre-engineering, mathematics, and physics students. Three one-hour lectures/week; open labs as required. Prerequisite: Math 250 or consent of the instructor.

11.0401-350—Programming Structures and Techniques (S) 3 hrs. cr.

Introduces basic concepts of information and techniques for operating on data/program structures. Develops concepts and use of program control constructs, information structures, files, searching, sorting, updating, linking, and attendant program documentation, debugging, and testing. Three one-hour lectures/week; open labs as required. Prerequisite: Comp. 120 or 130 and upper division standing or consent of instructor.

11.0501-410—Information System Analysis (F)

3 hrs. cr.

Infromation System Concept. Nature of the decision making process applied to operational, tactical and strategic level systems. Role of systems analysis and the systems analyst. Basic analysis tools and techniques. Developing system requirements. Determining economics of alternative systems. Three one-hour lectures/week; open labs as required. Prerequisites: Comp. 302.

11.0501-420—Systems Design and Implementation (S) 3 hrs. cr.

To provide the students with supervised and practical experience in designing computer based systems. Basic design tools and objectives. Documentation. Hardware/Software selection. System controls. Design and engineering of software. Data base development. Implementation and post implementation evaluation. Project management and language planning. Three one-hour lectures/week; open labs as required. Prerequisites: CIS 410 and CIS 450 or CIS 310.

11.0401-450—Computerware (F)

3 hrs. cr.

Provides a working view of hardware, operating software, and firmware; examines cost/performance factors of component modules and systems. Systems for filing, managing data, and communicating are studied. Three one-hour lectures/week; open labs as required. Prerequisites: A programming course and CIS 350 (Programming Structures and Techniques).

11.0401-460—Compilers (S)

3 hrs. cr.

Introduction to the basic building blocks of a compiler: lexical, syntactic, and semantic analysis, definition of the grammar, symbol table manipulation, storage allocation and code generation. Three one-hour lectures/week; open labs required. Prerequisites: CIS 330.

11.0305-498—Seminar in Computer Science (demand)

1-3 hrs. cr.

A seminar for students vocationally oriented toward automated data processing. The course content will depend on the needs of the attendees. Prerequisites: 60 hours college credit with a grade point average of 3.0 or permission of the department head.

11.0305-499—Independent Study (demand)

1-3 hrs. cr.

An independent study course structured by the adviser with approval of the department head. Prerequisite: 60 hours credit with a grade point average of 3.0. Registration in the course must be approved by the adviser and the department head.

### CRIMINAL JUSTICE ADMINISTRATION

### School of Technology

Seneker: Mosher; Richards; Spurlin; Terry; Whittle; Williams

Two degree options are available, the Associate of Science Degree in Law Enforcement (See page 57) and the Bachelor of Science in Criminal Justice Administration. Students seeking either degree must first schedule a conference

with the program director.

The B.S. in Criminal Justice Administration is designed for persons planning careers in law enforcement, juvenile justice, corrections, probation and parole, private or industrial security, federal investigative agencies, related positions, and when combined with the ROTC program, for Military Police officers. Many of these positions have requirements relating to physical condition and integrity of personal background with which the student should become familiar.

The Bachelor of Science degree in Criminal Justice Administration requires the completion of the required General Education courses and the following; 22 hours of required CJAd courses, LE 100, LE 110, LE 250, LE 150, LE 210, LE 290, CJAd 490. Plus an additional 20 hours of CJAd electives and the following supporting courses, all selected with adviser approval: Soc 110, Soc 210, Soc 351 plus 3 hours other sociology courses; Psych 100 and 6 additional hours of psychology; 18 hours of elective courses chosen with adviser approval for a total of 124 semester hours. Students taking LE 190 are not eligible for CJAd 490.

43.0103-130-Introduction to Security (S)

3 hrs. cr.

Overview of the security industry and its role in loss prevention. Public vs. private security roles for retail business, industrial, and governmental protection. Basic principles such as target hardening, current problems.

50.0605-210—Basic Photography (F)

3 hrs. cr.

Lecture and laboratory procedures for use of cameras, lenses, developing negatives and prints and enlarging. Prerequisite: Phys. 100 or consent. Lab fee.

43.0103-230—Physical Security (S)

3 hrs. cr.

Physical aspects of the security industry and its role in loss prevention for retail business, industrial, and governmental protection. Consideration of barriers and perimeter protection, alarm systems, computer and hazardous materials protection, survey techniques.

43.0103-300—Criminal Investigation II (S)

3 hrs. cr.

Major case investigative methods, sources of information, development of leads, methods applicable to organized crime and specific offenses. Prerequisite: LE 200.

43.0103-310—Traffic Accident Investigation & Controls (F) 3 hrs. cr.

Theory and techniques for investigation and reducing occurrence of motor vehicle accidents, collection and evaluation of physical evidence and reporting. Prerequisite: 3 hrs. college level mathematics.

43.0103-320-Probation and Parole (S)

2 hrs. cr.

Study of presentence investigation methods, predicting parole behavior, supervisory practices, legal aspects. Prerequisite: LE 100, Soc 110.

43.0103-330—Loss Prevention Techniques (F)

3 hrs. cr.

Security techniques in loss prevention, for retail business, industry, governmental protection, hotel and motel, hospital, school, transit systems and utilities. Prerequisites: CJAd 130, CJAd 230.

43.0103-331—Administration of Security Systems (demand) 3 hrs. cr.

The security administrator's role in business, industrial, and governmental protection. Organizing, training, managing, and designing security programs. Prerequisites: CJAd 130, LE 110, LE 290, Econ 180.

50.0605-340—Basic Color Photography (S)

3 hrs. cr.

Photography applied to the Basic Color Theory concepts used in the production of color transparencies. Laboratory fee. Prerequisite: CJAd 210 or permission.

43.0103-410—Juvenile Procedures (F)

3 hrs. cr.

Juvenile and family court procedures and substantive law as it applied to the youthful offender. Procedures for juvenile officers such as collection of evidence, taking into custody, and development of the case. Prerequisite: LE 210 or consent.

43.0103-411—Juvenile Corrections (S)

3 hrs. cr.

Overview of the design and legal requirements of juvenile correctional institutions, including an analysis of the juvenile interstate compact laws, and management principles of juvenile correctional institutions. Prerequisites: Soc. 312, CJAD 410.

43.0103-450—Criminal Evidence (S)

3 hrs. cr.

Study of the rules of evidence, admissability, presumptions, inferences, burden of proof, exceptions to the hearsay rule. Prerequisite: LE 210, LE 250.

43.0103-490—Internship in Criminal Justice (Arr.)

Extensive practical experience with an area Criminal Justice agency, subject to individual committee approval. Not open to those who have taken LE 190. Prerequisite: Junior standing CJAd majors and consent.

43.0103-298—Special Topics in Criminal Justice Administration (demand)

1-8 hrs. cr.

Course content varies and is designed to meet current needs and interests in the rapidly changing field of Criminal Justice Administration. Precise topics are announced, and prerequisites are stipulated in the course syllabus.

43.0103-498—Seminar in Criminal Justice (demand)

1-3 hrs. cr.

A survey of current advances in the field. Precise topics to be announced, for upper division majors in CJAd or those who have completed the A.S. degree in law enforcement. Prerequisite: consent of instructor.

43.0103-499—Independent Study in Criminal Justice (Arr.) 1-3 hrs. cr.

Individually directed study for advanced majors in areas of criminal justice selected with adviser approval. Proposal must be approved by program director and school dean. 3.5 grade average in major area or consent required.

### **DENTAL ASSISTING**

### **School of Technology**

Karst, Noirfalise, Ensminger

Missouri Southern State College offers a planned two semester curriculum in the field of Dental Assisting. Graduates of this program are eligible to take the examinations required for certification as a Certified Dental Assistant.

The Dental Assisting curriculum is a limited enrollment curriculum; therefore admission to the College does not automatically convey admission to this program; however eligibility for admission to the College must be established before consideration for admission to Dental Assisting can be given. Applications for admission to Dental Assisting should be submitted to the Dental Programs Office before May 1. Information regarding admission requirements to the Dental Assisting curriculum may be obtained from the Director of Dental Programs.

Dental Assisting courses must be taken in the prescribed order. A deficient grade (D or F) in a dental assisting course may prevent the student from enrolling in the next prescribed course.

Completion of this program requires the completion of all Dental Assisting (17.0101) courses plus other courses indicated in the suggested order of study.

17.0101-100—Dental Science I (F) 3 hrs. cr.

An introduction to human anatomy and physiology with emphasis on the head and neck region. Includes dental anatomy with a detailed study of cusps, grooves, roots, ridges, and their relationship to occlusion. Three lectures per week.

17.0101-120—Dental Laboratory Procedures I (F) 3 hrs. cr.

This course is a study and practicum in pouring of plaster and stone casts, the preparation of restorative and impression materials, and the use of dental equipment. Two lectures; two laboratory per week.

17.0101-130—Dental Orientation (F) 2 hrs. cr.
Orientation to the dental profession including organizational structure, ethics and leg-

Orientation to the dental profession including organizational structure, ethics and legislature, and philosophy of dental prevention. Clinical application of preventive methods is included. Four hours lecture per week for 10 weeks.

17.0101-140—Dental Operative Procedures (F) 5 hrs. cr.

Course deals primarily with the care and manipulation of equipment, instruments and supplies. It also includes the recognition of armamentarium and their relationship to dental procedures. First 10 weeks: three lectures; 6 hrs. laboratory per week. Last 6 weeks: 3 lectures, 3 hours laboratory, 16 hours extramural clinical training per week.

17.0101-150—Dental Science II (S) 3 hrs. cr.

An introduction to microbiology, pharmacology, pathology, and diet and nutrition

An introduction to microbiology, pharmacology, pathology, and diet and nutrition related to the science of dentistry. Three lectures per week.

17.0101-160—Dental Laboratory Procedures II (S) 3 hrs. cr.
Continuation of Dental Laboratory Procedures I emphasizing prosthetics. Two lectures;

one 3 hour laboratory per week.

17 0101-170—Dental Secretarial Procedures (S)

3 hrs. cr.

17.0101-170—Dental Secretarial Procedures (S) 3 hrs. cr.
General office management, record keeping, appointment scheduling telephone techniques, collection of accounts and communication. Three lectures per week.

17.0101-180—Dental Specialties (S)

3 hrs. cr.

The course deals with instruction and procedures in dental specialties. Lectures include instruction on first aid, dental emergencies and certification in CPR. 3 hours lecture per week.

17.0101-190—Clinical Dental Assisting (S)

5 hrs. cr.

Sixteen hours clinical practice per week in participating clinical facilities.

### **DENTAL HYGIENE**

### School of Technology

McCown, Ensminger, Ward

Missouri Southern State College offers an Associate of Science in Dental Hygiene. Satisfactory completion of the requirements for this degree qualifies the graduate to take the National Board Dental Hygiene Examination as well as the clinical examinations required for licensure in Missouri and other states.

Enrollment in Dental Hygiene is limited; therefore admission to the College does not automatically convey admission to the Dental Hygiene curriculum; however admission requirements of the College must be met before an applicant will be considered for admission to Dental Hygiene. Admission to Dental Hygiene requires special testing and other special requirements. Complete details regarding the special reouirements, tests, etc., may be obtained from the Dental Hygiene Department. Applications for admission to Dental Hygiene should be submitted to the Dental Hygiene Department before May 1.

Dental hygiene courses must be taken in the prescribed order. A deficient grade (D or F) in a dental hygiene course may prevent the student from enrolling in the next prescribed course.

The Associate of Science in Dental Hygiene requires the completion of all Dental Hygiene (17.0102) courses, specified supporting science classes, and general education requirements for the Associate of Science. Deviations from the suggested order of study must have adviser approval.

17.0102-101—Fundamentals of Dental Hygiene I (F) 3 hrs. cr.

Introduction to the fundamental theories, principles, and procedures necessary to provide dental hygiene services. Emphasis is placed on dental equipment operation and maintenance, principles of asepsis, oral physiotherapy, basic instrumentation, medical/dental history data collection, oral inspection, and hard and soft deposits of the teeth. Dental hygiene theories and principles are applied in a clinical laboratory setting. Two lectures; one 4 hour laboratory each week.

17.0102-102—Fundamentals of Dental Hygiene II (S) 3 hrs. cr.

A continuation of Fundamentals of Dental Hygiene I with emphasis on the enrichment of skills necessary to perform preventive oral health services. Emphasis is placed on anatomy of the periodontium, additional principles of instrumentation, polishing, dental charting, dental stains, oral cancer, dentrifices, mouthrinses and fluoride agents. Application of these theories and techniques is made in a clinical laboratory setting. Two lectures; one 4 hour laboratory each week.

17.0102-140—Dental Morphology (F) 1 hr. cr.

Detailed study of the tooth morphology of deciduous and permanent teeth in relation to fossal cusps, grooves, ridges, roots and the relationship of form and function. Occlusion and malocclusion are studied according to their relationship to dental health. A self-instructional program supplemented by one lecture per week.

17.0102-150—Oral Histology and Embryology (S)

3 hrs. cr.

Study of the gross and microscopic development of the teeth, supportive structures of the teeth, and embryology and anatomy of the head and neck region. Two lectures, one 3 hour laboratory per week.

17.0102-160—Dental Radiology (S)

2 hrs. cr.

The study of the theory and technique of exposing, developing, mounting and care of dental radiographs. Interpretation of radiograph findings is discussed. One lecture; three hours laboratory per week.

17.0102-190—Clinical Dental Hygiene I (Summer)

3 hrs. cr.

Introduces the student to the clinical practice of dental hygiene. The student gains experience in providing patient services through providing oral prophylaxes, making and processing radiographs, presenting patient education, applying fluoride, charting the oral cavity, etc. Treatment and prevention of dental office emergencies is covered in the lecture session. One lecture, one seminar, and 16 hours laboratory per week.

17.0102-200—Dental Health Education (F)

3 hrs. cr.

Fundamentals of teaching and learning theories are discussed. The student learns to develop teaching units and lesson plans for various public groups and/or organizations. Practical experience in public schools and community groups is included. The eight recognized dental specialties are discussed and their relationship to dental hygiene and preventive dentistry. Three hours lecture per week.

17.0102-210—Perio-Pathology (Summer)

3 hrs. cr.

Lectures and laboratory periods devoted to the study of all pathological conditions, etiology of diseases, degenerative process, inflammation, infection, and immunity. Etiology, classification, treatment, and prevention of periodontal disease will be stressed. Six hours lecture, two hours laboratory per week.

17.0102-220-Dental Materials (S)

3 hrs. cr.

The student will study and experience working with various restorative and impression materials used in dentistry. The course includes pouring of plaster and stone casts. Two lecture; one 2 hour lab per week.

17.0102-290—Clinical Dental Hygiene II (F)

5 hrs. cr.

Continuation of Clinical Dental Hygiene I with added responsibilities as skills develop. Experience is gained in providing services to mentally and physically handicapped patients through extramural affiliation assignments. Information on advanced dental hygiene techniques is presented in the lecture portion of the course. One lecture; 16 hours laboratory per week.

17.0102-310—Nutrition (S)

2 hrs. cr.

Nutrition and diet are studied according to their relationship to dental health. Biochemistry of digestion and the utilization of nutrients is covered. Special emphasis is given to dietary analysis as part of total health care and the role of the dental hygienist in providing nutritional counseling. Two lectures per week.

17.0102-320—Pharmacology (F)

2 hrs. cr.

The study of principles of drug actions and characteristics of major drug groups including sources of drugs, methods of their administration, classification, dosage, therapeutic action, and drug interactions. Emphasis is placed on drugs affecting oral health and drugs used in dentistry. Two lectures per week.

17.0102-330—Ethics and Community Dentistry (S)

3 hrs. cr.

Study of professional ethics and commitment, professional organizations, state practice acts, and practical consideration of methods and problems associated with operating and maintaining a dental practice. The scope of public and dental public health will be defined

and identified. Consideration is given to philosophy, health legislation, federal, state, and local health programs, needs and demands for dental care and mechanisms for financing dental care. Three lectures per week.

17.0102-390—Clinical Dental Hygiene III (S)

5 hrs. cr.

Continuation of Clinical Dental Hygiene II. Clinical experience in advanced clinical procedures and dental assisting procedures is provided including experience in extramural facilities. Principles of four-handed dentistry are presented in the lecture portion of the course. One lecture; 16 hours lab per week.

### DRAFTING AND DESIGN

### School of Technology

Morgan, Nickolaisen

The Associate of Science Degree in Drafting and Design requires the completion of the general education courses (See page 57) plus the following: DRAF 110, 120, 130, 202 or 204, 210, 220, 230, COMP 130, MATH 30 or 130 and MATH 112 and at least 7 hours of electives selected from the following: MACH 100, MACH 110, IA 300, COMP 120, ART 132, ART 230, Eng 103 or CJAD 210. Electives should be selected with the assistance of the student's advisor.

48.0105-110-Introductory Drafting (F,S)

3 hrs. cr.

An introduction to drafting, including the use of instruments, geometric construction, lettering, orthographic projection, dimensioning, sections and conventions, auxiliaries, and pictorial drawing. One hour lecture and four hours laboratory per week.

48.0105-120—Descriptive Geometry (S)

3 hrs. cr.

Practical applications of principles to problems of civil, structural, mechanical and architectural engineering. One hour lecture and four hours laboratory per week. Prerequisite: DRAF 110.

48.0105-130—Machine Drafting (S)

3 hrs. cr.

Detail and assembly drawings of machines, threaded fasteners, and gears. Use of machine tools, processes and materials. One hour lecture and four hours laboratory per week.

Prerequisite: DRAF 110.

48.0105-202—Tool Design (demand)

3 hrs. cr.

Principles of tool design with emphasis on the design and graphical representation of common jigs and fixtures used in the manufacturing industry. One hour lecture and four hours laboratory per week.

Prerequisites: DRAF 130.

48.0105-204-Mechanical Design (F)

3 hrs. cr.

Principles of machine design with emphasis on the proper selection, function and graphical representation of common components. One hour lecture and four hours laboratory per week. Prerequisites: DRAF 120 & 130.

48.0105-210—Production Illustration (S)

3 hrs. cr.

Pictorial drawing with emphasis on application to both residential and commercial work. Methods of mechanical illustration and exploded views. Architectural application of pictorial drawings in the form of perspectives. One hour lecture and four hours laboratory per week. Prerequisite: DRAF 110 or consent of instructor.

### 48.0105-220—Architectural Drafting (S)

3 hrs. cr.

An introduction to the fundamentals of architectural drafting. Instruction in the principles of design; building details and use of modern construction materials for residential building. One hour lecture and four hours laboratory per week. Prerequisite: DRAF 110 or consent of instructor.

#### 15.0203-230-Survey & Mapping (F)

3 hrs. cr.

Theory, principles, and practices of surveying and mapping as applied to construction, site and right-of-way planning. Use and care of survey instruments and equipment. Survey reports and computations, and preliminary surveys will be stressed. One hour lecture and four hours laboratory per week. Prerequisite: DRAF 110 or consent of instructor.

**48.0105-298—Special Topics in Drafting & Design (demand) 1-8 hrs. cr.** Study of special topics in Drafting & Design. Each offering of the course on a special topic or topics not normally included in another course. Prerequisites to be determined by the department and stipulated in syllabus.

48.0105-498—Seminar in Drafting & Design (demand) 1-3 hrs. cr.

Covers specialized knowledge and skills related to new developments in Drafting & Design. Topics will vary by the semester and situation. Prerequisite: An Associate Degree in Drafting & Design, or senior standing in Management-Technology or Industrial Arts.

## 48.0105-499—Independent Study in Drafting & Design (demand) 1-3 hrs. cr.

Individually directed reading, research and discussions in selected areas of Drafting for advanced majors. Scope, depth, area of concentration, and credit hours will be arranged upon entry into the course. Offered by arrangement. Prerequisite: Permission of instructor.

### **ECONOMICS AND FINANCE**

### School of Business Administration

Hamilton, Jaswal, Larimore, Leitle, Marion, Miller

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with a major in Economics and Finance.

06.0501-180—The American Economic System (F,S) 3 hrs. c

A general education course designed to study the goals, organization and operation of the U.S. market economy. Topics studied include: scarcity and choice; the operation of the pricing mechanism and the role of competition, profits, savings and investment in the allocation of resources; the economic functions of government; limitations of the market system; market versus command economies; and the industrial organization of our contemporary capitalistic economy with emphasis on the activities of the business firm. Not available to Business majors or to those students who have taken Econ 201 or 202.

06.0501-201—Principles of Economics (Macro) (F,S) 3 hrs. cr.

A study of economic principles that apply to the economy as a whole, such as: total income, output, and employment, general price level, economic growth, international trade, monetary and fiscal policies and current economic problems. Prerequisite: sophomore standing or permission.

06.0501-202—Principles of Economics (Micro) (F,S) 3 hrs. cr

A study of fundamental institutions of the American Economy, the theory of price determination, and the theory of income distribution. Prerequisite: Sophomore standing or permission.

# 06.0501-300-Money and Banking (F,S)

3 hrs. cr.

The nature, need constituents, functions, role, creation and destruction of money and credit; Financial institutions and their functions with special emphasis on the commercial banking system and the Federal Reserve system; introduction to monetary theory and policy. International aspects of money and monetary policy. Prerequisite: Econ 201 and 202.

# 06.0501-302—Economic Growth and Development (S)

3 hrs. cr

The meaning of economic growth and development, the problems associated with measurement and comparisons of economic growth between more developed and less developed countries, the study of changes that take place in the course of growth, the factors that contribute or hinder growth, the economic growth theories and models, policy considerations, and the international aspects of economic growth. Prerequisites: Econ 201 and 202.

#### 06.0501-312—Economic Resources (S)

3 hrs. cr.

A study of the allocation of economic resources in order to satisfy human wants and desires through the use of economic principles and concepts. Both micro and macro principles will be utilized as well as functional concepts of resources, trends in resource development and utilization, and an appraisal of resource potentials. Prerequisites: Econ 201 and 202.

# 06.1301-322—Business Statistics II (See Gen. Bus. 06.1301-322 Bus. Statistics II.)

# 06.0501-350-Financial Management (F,S)

3 hrs. cr.

An examination of the financial structure of business organization, capital structure and methods of raising fixed and working capital; questions of financial policy, such as dividend policies and the conservation of surplus; comparative balance sheets and income-expense statements. Prerequisite: Econ. 201 and 202, Acct 202.

#### 06.0501-401-Microeconomic Analysis (F)

3 hrs. cr.

A study of the price system and resource allocation through a system of markets and prices, the conditions for an efficient economic system, the determination of product and input prices under various types of markets. Marginal productivity and income distribution, and optimum welfare. Prerequisites: Econ. 201 and 202.

#### 06.0501-402—Macroeconomic Analysis (S)

3 hrs. cr.

A study of the fundamental concepts and theories of the aggregate economic variables, an aggregate economic model of the economy including goods market, money market, labor market, and Foreign market; their interrelation and interaction. Comparative static and dynamic analysis. The economic growth in a dynamic setting, inflation and income distribution. Prerequisites: Econ. 201 and 202.

#### 06.1001-411—Investments (F)

3 hrs. cr.

### 06.0501-412-Urban and Regional Economics (S)

3 hrs. cr.

An introduction to the application of economic principles in the study of urban and regional economic environment. The course analyzes the spatial price theory, transportation costs, the law of markets, the location theory and the spatial distribution of activities, the economic base theory input-output technique, the central place theory, land use, regional growth, migration, regional policy objectives and current urban problems. Prerequisites: Econ. 201 and 202.

# 06.0501-498—Seminar in Economics and Finance (demand) 1-3 hrs. cr

A seminar for upper division majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission. Examples of seminars offered in the past are:

498-Seminar in International Economics

498-Seminar in Business Cycles

# 06.0501-499—Independent Study in Economics-Finance (demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of economics and finance for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission and 3.00 G.P.A.

### **TEACHER EDUCATION**

# School of Education and Psychology

Anderson, Banks, Easterday, Highland, Merryman, Ray, Sandrin, Snyder, Steere, Wiley, Wuch

Realizing the important contributions made to our society by its educational system Missouri Southern State College has made the preparation of teachers one of the basic objectives of the institution. The College faculty supports the objective by recognizing the preparation of teachers as the responsibility of the entire College. The Department of Education has the overall responsibility for the actual administration of the Teacher Education Program.

The Teacher Education Program is based on the following basic beliefs and assumptions:

- 1. A teacher should be provided a broad background in general education.
- A teacher should be required to demonstrate an acceptable degree of mastery in his specialized teaching field.
- A teacher should possess the personal qualities that can be identified as essential for effective teaching.
- A teacher should demonstrate an understanding of the contribution education can make toward the continuation and improvement of our society.
- A teacher should possess the professional attitudes and competencies necessary to serve the education profession effectively.

As a reflection of these beliefs and assumptions, the Education Department seeks to achieve these aims through the Teacher Education Program.

- To provide the graduates of high schools in the College service area with information on teaching as a profession.
  - To identify and attract to the program of teacher education students who
    possess the intellectual, personal and physical qualities necessary to become effective teachers.
- To provide a program of studies and experiences that will develop graduates capable of effectively performing their duties as teacher in the elementary or secondary schools.
- 4. To provide prospective teachers with a program that emphasizes the importance of the basic theories of learning in teaching.
- To cooperate with local, state, regional, and national agencies that have as their purpose the improvements of education.
- To aid school administrators, boards of education, and other educational organizations with problems relating to education programs.

# **Bachelor of Science in Education Degree**

Students who are planning a career in teaching in the elementary and or secondary school work toward the degree Bachelor of Science in Education. The satisfactory completion of the requirements for this degree qualifies a person for life certification in Missouri. Recipients of other degrees, who later decide to teach, can be certified through the State Department of Education meeting the requirements outlined by the Dean of the School of Education and Psychology.

Students deciding to work toward the degree Bachelor of Science in Education must elect to major in elementary education or in one of the subject matter areas available to those seeking a secondary certificate.

# ADMISSION TO THE TEACHER EDUCATION PROGRAM

Admission to Missouri Southern State College does not automatically confer

admission to the Teacher Education Program.

Students who plan to enter the professional education sequence and become certified teachers are required to apply for admission to the Teacher Education Program. This application is made at the time the student is enrolled in Structure of Teaching, EDUC 320/330, and Microteaching, EDUC 321/331, which is taken after the student has done 64 hours of work. The application form may be obtained from the Department of Education Office. Each application is reviewed individually by the Teacher Education Admissions and Retention Committee.

In determining a student's fitness for the teaching profession, the committee considers test results, scholarship, verbal proficiency, experience with children and youth, autobiography, physical and mental health, and appropriate faculty recommendations. The minimum scholarship essential for acceptance into the Teacher Education Program is a cumulative grade point average of 2.5 for 60 or more semester hours.

The Committee decisions on student applications fall into three categories: (1) Approved for admission to the teacher education program; (2) Approved on the condition that certain stated requirements be met; or (3) Advised not to continue in teacher education. The student must have acceptance into the program before he is admitted to the professional education sequence of courses.

# Supervised Student Teaching

A second crucial point of screening in the Teacher Education Program occurs when the student is ready to do supervised teaching during the "Professional Semester" of the senior year. To qualify for supervised teaching, the student must have a minimum 2.5 cumulative grade point average at the time of application and be recommended for student teaching by the major department and/or approved by the Teacher Admission and Retention Committee. The National Teachers Examination is taken during the professional semester.

#### Advisement

Each student who enrolls at Missouri Southern State College will have an adviser assigned who will help the student plan his program of studies. A student above the sophomore level will have faculty advisers assigned by the school in which he chooses to specialize. All post-graduates seeking certification to teach are advised by the Department of Education.

Information regarding teacher certification requirements, employment opportunities, professional education requirements, and supervised student teach-

ing may be obtained from the Department of Education.

# TEACHER CERTIFICATION BY "ACADEMIC CONTRACT"

The Missouri State Department of Education has designed a procedure whereby college graduates who did not take a prescribed teacher education program in their degree programs can meet the necessary requirements to become a certified teacher by filing an "Academic Contract" with certain approved colleges and universities. The designated college is responsible for in-

forming the State Department of Education what credit will be needed for certification and for the recommendation to issue the teaching certificate.

An "Academic Contract" may be executed with Missouri Southern State College on the condition that the person qualifies for admission into its teacher education program, has a signed statement of a teaching position from a school administrator, and has been properly enrolled in the college. All regular graduates of the teacher education program at Missouri Southern are awarded certification upon the recommendation of the Dean, School of Education and Psychology.

# THE COUNCIL ON TEACHER EDUCATION

The Council on Teacher Education has a membership composed of college faculty, students and elementary and secondary school personnel. The duties of the Council are to advise, recommend, and evaluate programs leading to teacher certification at this college.

#### **ELEMENTARY EDUCATION**

A student specializing in elementary education must complete the following courses:

#### **General Education:**

Eng composition (101) Eng Composition (102 or 111) Literature elective Music or Art Humanities/Fine Arts elective Communications (100, 131, or 302) **Biological Science** Physical Science Math (111) Economics (180) American History (110) National, State Government (120) Geography Sociology or Anthropology Physical Education activity (2 hrs.) School Health (HPER 370) Orientation (Psy 120)

# Departmental Requirements:

Math Elem Teach II (Math 120) Child Liter (Eng. 325) Art Educ (Art 220) Music Elem-Sch Music 332 Except Child Educ 302 Human Devel Psy 110 Clin Exper (2 hrs) Educ 300 Ed Psych Psy 310 Elem Sch Health HPER 311 Sci Elem Sch Educ 311 Prob in Arith Educ 312 Lang Arts Educ 340 Intro Reading Educ 342 Reading Educ 343 Diag & Rem Read Educ 470 Struc of Teach Educ 320 Microteaching Educ 321 Instr Media Educ 370 Found of Educ Educ 402 Crit Issues Educ 432 Teach Soc Sc Educ 322 Student Teaching Educ 442 Electives from the following: (at least 4 hours) Indiv Curri Devel Educ 412 Intro to Couns Educ 420 Classroom Mgt Educ 423 Meas-Eval Psy-Educ Psy 412 Other Educ courses specifically approved by the Dean of Educ

<sup>\*</sup>Reading Secondary Educ 422

<sup>\*\*</sup>Area of Concentration-21 hrs.

\*Reading Secondary EDUC 422 is offered on the 8 week block, but it may not be taken in place of one of the designated electives. EDUC 422 is also offered on the sixteen week schedule and may be taken any time after the first semester of the sophomore year.

\*\*The 21 hour of concentration in designated curriculum areas is required of all elementary education majors. The area of concentration may consist of a composite of courses in an area or it may consist of a structured series of courses that will lead to certification in grades 7-9. For further information consult your advisor.

#### REMEDIAL READING

Remedial Reading—A person who completes a baccalaureate degree with a teaching major may also be certified in the field of remedial reading by satisfactorily completing the following courses: Educ 302, Educ 342 or Educ 422. Educ 343, Educ 470, Educ 471, Educ 472, and Educ 474 (Educ 422 is required for secondary remedial reading.)

#### SPECIAL EDUCATION

Special Education is offered as an area of concentration in Elementary and/or Secondary Education. Persons interested in such certification for teaching special education at any level should check with the Department of Education for details and requirements. All persons preparing to teach in a special education area (LD, MH, BD) must complete supervised student teaching or a practicum in that certification area. Careful planning makes it possible for a student to receive certification in three areas of special education with little additional course work. In addition to the requirements for the elementary (K-9) or the secondary (7-12) Bachelor of Science Degree in Education, students seeking special education certification take the following courses: Educ 324, 430, 474, 420, 407, Educ 423 or Psy 382, a sociology course, plus a special methods course and a practicum with Learning Disabled, Mentally Handicapped, or Behaviorally Disordered students.

Learning Disabled—For certification to teach Learning Disabilities the following is required:

The elementary or secondary course sequence, the generic special education sequence above, EDUC 404 Methods of Teaching Children with Learning Disabilities, EDUC 442 or 446 Student Teaching or Practicum with Learning Disabled children.

Mentally Handicapped—Certification requirements to teach the Mentally Handicapped:

Include the elementary or secondary sequence, the generic special education sequence listed above, EDUC 403 Methods of Teaching Mentally Handicapped Children and EDUC 442 or 446 Student Teaching or Practicum with Mentally Handicapped Children.

Behavior Disorders-For certification to teach Behaviorally Disordered the requirements are:

Either the elementary or secondary course sequence, the special education sequence, Plus EDUC 405 Teaching Children with Behavior Disorders, and EDUC 442 or 446 Student Teaching or Practicum with Behavior Disordered Children.

#### SECONDARY EDUCATION

The student who desires to teach in a secondary school may choose to become qualified in a single teaching field with a high degree of specialization, or in two different teaching fields with a lesser degree of specialization in each. Available for secondary school teaching are:

- 1. Art
- 2. Biology
- 3. Chemistry
- 4. Business Education
- 5. English
- 6. Industrial Arts
- 7. Spanish
- 8. Mathematics

9. Music

10. Physical Education

11. Physics

12. Physical Science

13. Social Science

14. Speech & Theatre

Along with a teaching specialty a student may elect a supporting area (a minor) from any one of the above listed teaching specialties.

Under certain circumstances, it is possible for a person to become qualified to teach art, music, or physical education at both the elementary and secondary school level. Students interested in such a program should consult the department involved.

Students interested in certification to teach **driver education** or to **coach interscholastic sports** should consult the Physical Education Department.

A student emphasizing secondary education must also complete departmental course requirements under either Plan A or B.

# Plan A: (Double Major)

This plan is intended for those persons who desire to qualify as teachers in two different subject matter areas. Each area requires a minimum of 30 semester hours of specific course work which must meet minimum State Department of Education requirements. Plan A is not available in social science, music, or in programs preparing teachers for both elementary and secondary certification. If Plan A is selected, the second teaching field is required. Students may select an adviser in either department he chooses to major in or from the Department of Education.

# Plan B: (Single Teaching Field, Comprehensive Major)

This plan is intended for the person who wishes to concentrate his teacher preparation in one subject matter area only. Forty or more semester hours are required in the subject matter area or related supporting courses listed in this catalog by the department.

A person choosing a single teaching field may also earn a minor of 21 semester hours of specific course work in some other or related field, which will qualify him for a second teaching field at only the junior high school level.

Each department that prepares students for secondary school teaching has developed a program of studies to be pursued by students who choose to follow either of the above plans. Plan B is mandatory for majors in social science, music, and in certain programs preparing students for dual certification at both the elementary and secondary school level.

#### **PROFESSIONAL EDUCATION COURSES**

The following sequence of courses is to be completed by students planning to teach at the secondary or elementary level.

# Freshman-Sophomore Year

Persons who are planning to enter teaching should take Psy. 110, Psychology of Human Development, and Educ 302, The Exceptional Child, during their first two years. Secondary School majors seeking an extended teaching certificate which will also qualify them to teach the same area in the elementary school, must have a course in child development. Any person preparing at the secondary level must have either Psy. 110 Human Development or separate courses in General Psychology and Adolescent Psychology.

#### **Junior Year**

Elementary Teaching  *Psy 310 Educational Psychology Educ 300 Clinical Experiences Educ 320 Structure of Teaching Elem Educ 321 Microteaching Elementary Educ 370 Introduction to Instructional Media	2 hrs 2 hrs 2 hrs 2 hrs 2 hrs 2 hrs
Secondary Teaching  *Psy 310 Educational Psychology Educ 300 Clinical Experiences Educ 330 Structure of Teaching Secondary Educ 331 Microteaching, Secondary Educ 370 Introduction to Instructional Media	2 hrs 1-2 hrs 2 hrs 2 hrs 2 hrs

<sup>\*</sup>May be taken sophomore year

#### Senior Year

The "Professional Semester" occupies one complete semester. For one-half of the semester, the student enrolls in professional semester courses and during the other one-half does supervised teaching (approximately eight weeks). COURSES OUTSIDE THIS BLOCK SHOULD NOT BE SCHEDULED. Students are also discouraged from participation in outside activities during student teaching since this aspect of their program demands much time. Required courses are:

# **Elementary Teaching**

Educ 322 Methods of Teaching Social Studies in Elem. School

Educ 402 Foundations of Education Educ 432 Critical Issues in Education

Educ 442 Student Teaching, Elementary

Select two of the following:

Educ 412 Individualized Curriculum Development

Educ 420 Introduction to Counseling Educ 423 Classroom Management Psy 412 Psychological-Educational Testing OR other Educational Courses approved

by the Dean of Education and Psychology

# **Secondary Teaching**

Educ 402 Foundations of Education
Educ 432 Critical Issues in Education
Educ A course in Special Methods of
Teaching in the Major Field
Educ 462 Student Teaching, Secondary

Select one of the following:

Educ 412 Individualized Curriculum Development

Educ 420 Introduction to Counseling Educ 423 Classroom Management

Psy 412 Psychological-Educational Testing

OR other Education courses approved by the

Dean of Education and Psychology

\*\*Educ 422 Reading Secondary

\*\*May be taken after the first semester of the Sophomore year. May **not** be substituted for electives. Offered on the regular and the eight week schedule.

# **Combination of Elementary and Secondary Teaching**

For students majoring in art, music, foreign language, or physical education who desire certification at both the elementary and secondary levels, the following professional semester is recommended\*

Educ 402 Foundations of Education

Educ 432 Critical Issues in Education

Educ 464 Student Teaching, Combination of Secondary and Elementary Teaching in major field

Educ Special Methods course in Major Field

Select one of the following:

Educ 412 Individualized Curriculum Development

Educ 420 Introduction to Counseling

Educ 423 Classroom Management

Psy 412 Psychological-Educational Testing OR other Education courses approved by the

Dean of Education and Psychology

\*A course in Human Development is required for certification for grades K-12. If human development is not taken, a student must have a course in general psychology plus both adolescent and child psychology.

# **EDUCATION COURSE OFFERINGS**

13.1010-010—Techniques of Reading (F,S)

2 hrs. cr.

A reading improvement program consisting of group and individual work, intended primarily for students needing remedial work in reading. Individual diagnostic reading tests determine student needs. (Cannot be applied to any degree.)

13.0101-200—Exploratory Field Experiences (S)

1 hr. cr.

Students are assigned to elementary or secondary school for a minimum of forty eight clock hours to serve as educational aids. The course provides the opportunity for the student to explore teaching as a potential career based on actual classroom experience. A student must have earned 34 hours of college credit to be eligible for this course. Assignments, normally are made during the break during first and second semester.

13.0101-300—Clinical Experiences (F.S)

2 hrs. cr.

Students are assigned to elementary or secondary schools for 48 clock hours. In addition students will have an additional 16 hours of class time on campus. The classes will begin on the first regularly scheduled Tuesday and continue to meet every other Tuesday until the end of the semester. Students are provided the opportunity to work with a classroom teacher in their specialized area.

13.1004-302—The Exceptional Child (F.S)

2 hrs. cr.

A series of awareness experiences which deal with the added complexities an exceptional child presents to a regular classroom Teacher. Includes characteristics of the exceptional child, resources in the community, and legislation which determines school policy. Prerequisite: Psy. 110 or Psy. 300 or Psy. 301.

13.1316-311-Science in the Elementary School (F)

2 hrs. cr.

Course is designed to help teacher trainees (1) comprehend the basic notion of science and how children go about learning science, (2) develop materials suitable for demonstration, discovery, and inquiry lessons, and (3) develop the instructional skills necessary to achieve the first two goals. Students will develop lesson plans, learning kits, and will present a teaching episode. Prerequisites: Courses in biological and physical sciences and EDUC 321 (Microteaching). EDUC 321 may be taken concurrently with the course.

13.1311-312—Problems of Teaching Arithmetic in Elementary Schools (See Math 312) (F,S)

2 hrs. cr.

Basic course in the teaching of arithmetic in the elementary grades. The Application of principles of learning and techniques of presentation are considered. Techniques for diagnosis and remediation are treated as they relate to the elementary classroom. Prerequisite: 3 hrs. of math.

13.1204-316—Introduction to Early Childhood Education (F) (demand)

3 hrs. cr.

Students will be given opportunities to observe in different types of early childhood programs. A special emphasis will be given to working **with parents** in educating young children. Students will also be provided experiences involving planning for instruction. Using community resources for early childhood experiences will be emphasized. Students will be encouraged to work as volunteer teacher aides during the course.

13.1204-319—Early Childhood Education Curriculum and Materials (demand)

3 hrs. cr.

Course is designed to provide the student of early childhood education with a background in curriculum and materials for the young child. The student will have opportunities through the practicum to observe children involved in early childhood programs and to plan and conduct a lesson with children in each of the major curriculum areas, under supervision. The course will also provide the student opportunities to construct various teaching materials for early childhood education. Prerequisite: Psy. 310.

13.1202-320—Structure of Teaching Elementary (F,S)

2 hrs. cr

An integrated course including problems relating to teaching in the elementary school. The acquisition of instructional skills and strategies related to the teacher-learner situation is highlighted. Classroom organization and management, instruction innovations, and both verbal and non-verbal interaction skills are studied. The course is team taught. Enrollment in Micro-teaching (Educ 321) must be concurrent. Prerequisite: Psy. 110, Psy. 300, or 301, and Psy. 310. (Educ 300, 320, 321, and 370 are taken concurrently.)

13.1202-321—Microteaching (F,S)

2 hrs. ci

A required part of Educ. 320 and must be taken concurrently with it. Short teaching episodes are prepared, taught and analyzed via video-tape. The basic concern is with the demonstration of effective teaching skills. (Performance based, credit-non-credit grading.)

13.1318-322—Teaching Social Studies in Elementary School (F,S) 2 hrs.

cr.

Provides an introduction to the instructional materials and methods of teaching social studies in the Elementary School. This course is part of the Professional Semester.

13.1001-324—Introduction to Special Education (F,S)

3 hrs. cr.

An introduction to the subject and career field of Special Education. The course is an over-view of all areas of special education but not intended as a methods course for any specific disability. Survey of research related to the areas of LD, MH, BD. Prerequisite: Educ. 302, Psy. 110.

13.1205-330—Structure of Teaching Secondary

2 hrs. cr.

A study of the instructional skills, strategies and techniques of teaching in the secondary school. Development of the secondary school, classroom organization and management, instructional innovations, and both verbal and non-verbal interaction are studied. The course is team taught. Enrollment in microteaching (Educ 331), must be concurrent. Prerequisites: Psy. 110, Psy. 300, and Psy. 301, Psy. 310, (Educ 300, 330, 331, 370 are taken concurrently.)

13.1205-331—Microteaching (F,S)

2 hrs. cr.

A required part of Educ. 330 and must be taken concurrently with it. Short teaching episodes are prepared, taught, and analyzed via video-tape recordings. The basic concern is with the demonstration of effective teaching skills. (Performance based, credit-non-credit grading.)

13.1305-332—Teaching English and Language Arts in Secondary School (S)

2 hrs. cr.

Provides an introduction to the instructional materials and methods of teaching English, speech and foreign language in the secondary schools. This course is part of the Professional semester.

13.1316-333—Teaching Science in Secondary School (S) 2 hrs. cr.

Provides an introduction to the instructional material and methods of teaching science in secondary school. The course is a part of the Professional Semester.

13.1317-334—Teaching Social Science in Secondary School (S) 2 hrs. cr. Provides an introduction to the instructional planning, materials, and methods of teaching social science in secondary school. The course is part of the Professional Semester.

13.1312-335—Teaching Music in Secondary School (S) 2 hrs. cr.

Provides an introduction to the instructional planning, materials, and methods of teaching music in secondary schools. The course is part of the Professional Semester.

13.1303-336—Teaching Business in Secondary School (S) 2 hrs. cr. Provides an introduction to the instructional planning, materials, and methods of teaching business in the secondary school. The course is part of the Professional Semester.

13.1314-337—Teaching Art in Secondary School (F,S) 2 hrs. cr.

Provides an introduction to the instructional planning, materials, and methods of teaching art in the secondary schools. The course is part of the Professional Semester.

13.1314-338—Teaching Health and Physical Education in Secondary School (S) 2 hr

Provides an introduction to the instructional planning, materials, and methods of teaching physical education and health in the secondary schools. The course is part of the Professional Semester.

13.1311-339—Teaching Mathematics in Secondary School (S) 2 hrs. cr. Provides an introduction to the instructional planning, materials, and methods of teaching mathematics in the secondary schools. The course is part of the Professional Semester.

13.1202-340-Language Arts (F,S)

2 hrs. cr.

Foundation course for development of understanding attitudes necessary to teach written and oral communication at the elementary level.

13.1309-341—Teaching Industrial Arts in Secondary School

2 hrs. cr.

Provides an introduction to curriculum, methods, and materials for teaching the various industrial arts in secondary school. The course is part of the Professional Semester.

13.1205-342—Intro. to Developmental Reading (F,S)

3 hrs. cr.

First course in Reading Methods. Different approaches to teaching reading are studied and compared to individual learning styles of children.

13.1205-343—Assessing and Personalizing Reading Instruction (F,S)

3 hrs. cr.

A study of preventive and/or corrective methods and devices for the teaching of reading in the regular classroom. Emphasis on techniques for individualization and various types of grouping procedures. Prerequisites: EDUC 342 (Intro. to Dev. Rdg.)

13.1205-344—Teaching Speech and Theatre in Secondary School (S)

2 hrs. cr.

Techniques, methods, and course content used in teaching speech and theatre in the secondary school. To be taken the professional semester. Prerequisite: Admission to Teacher Education.

13.0301-370—Introduction to Instructional Media (F,S) 2 hrs. cr.

Designed to give the teacher a basic understanding of the preparation and use of the various audio-visual materials and devices, with emphasis on the preparation of such materials. Enrollment is limited to education majors. (Performance based credit-non-credit grading.) Taken concurrently with 320/330. Sections are offered for elementary education students and sections are offered for secondary education students. Students are urged to enroll in the section designated for their teaching area.

13.0901-402—Foundations of Education (F,S)

2-3 hrs. cr.

A study of the historical, philosophical, and sociological aspects of American education. Emphasis is placed upon the concepts of philosophical approaches to education theory and practice, and application of the teaching-learning theory and practice.

13.1006-403—Methods of Teaching the Mentally Handicapped

3 hrs. cr.

Designed to help the prospective or in-service teacher understand mental retardation. Attention is given to causes, diagnosis, curriculum and teaching methods especially suited to mentally retarded children. Prerequisites: Educ. 302.

13.1006-404—Methods of Teaching Children With Learning Disabilities (S)

3 hrs. cr.

Prepares teachers in the area of learning disabilities with particular attention to verbal communication disorders and visual motor integration problems. Diagnosis methodology techniques, curriculum, methods, and materials will be stressed. Prerequisite: EDUC. 302.

13.1005-405—Methods of Teaching Children With Behavioral Disorders

3 hrs. cr.

Established a teaching rationale utilizing a precision individualized teaching strategy which enables the emotionally disturbed learner to profit more fully from his school experiences. Prerequisite: EDUC. 302.

13.1006-406-Methods of Teaching the Severely Handicapped 3 hrs. cr.

Considers practices and problems in developing curriculum for severely mentally retarded and multiply handicapped children and adolescents. Appropriate materials, organization and instructional processes are studied. Prerequisite: Educ. 302.

13.0301-407—Diagnostic and Prescriptive Teaching (S) 3 hrs. cr

The course offers instruction in interpreting diagnostic information into an individualized prescription. Appropriate for regular classroom and special teachers. 2-3 hrs.

13.0301-412—Individualized Curriculum Development (F,S) 2-3 hrs. cr.

Designed for elementary and secondary education majors. Focus is placed on instructional programming for the individual student, strategies for individualizing, grouping for instruction, organizing a variety of learning activities and materials, instructional evaluation, home-school-community relations, and comparing alternative educational systems. Prerequisite: Admission to Teacher Education.

13.1101-420—Introduction to Counseling (F,S)

2-3 hrs. cr.

Survey of interpersonal communication skills, counseling philosophies, principles and practices. Designed for the classroom teacher as well as the specialist in counseling or special educator. Intended for working with both students and parents.

13.1315-422—Teaching Reading in Secondary Schools (F) 2 hrs. cr.

Designed to familiarize prospective secondary teachers with reading instruction. The importance of reading in all content areas is stressed. Secondary reading programs are discussed which include adaptive and tutorial strategies. Required for certification of all secondary education majors after August, 1984.

13.1299-423—Classroom Management (F,S)

2 hrs. cr.

This course provides the necessary concepts, skills and models, such as behavior modification, from which the trainee will develop a personalized three-dimensional approach to behavior and classroom management. The trainee will learn what can be done to prevent discipline problems, what to do when a problem occurs and what to do to decrease the possibility of problems recurring. Approaches will include behavior modification, assertive discipline, desist techniques, reality therapy, and other management techniques.

13.1012-430—Language Development of Exceptional Children 3 hrs. cr.

Concerned with normal language development in children. Emphasis is placed on factors that interfere with speech and language development, especially for handicapped children. The development of articulation and human speech mechanism are also studied.

13.0401-432—Critical Issues in Education (F,S) 2 hrs. cr.

Current problems in the area of education are explored, with special regard to legal and professional role of school personnel, their relationship to federal and state governments, and to local school districts; certification, salary schedules, retirement and other benefits, professional organizations for teachers, relationship with administration, pupils, parents, and the community. Prerequisite: Admission to Teacher Education. Offered in the Professional Semester.

13.0301-435—Materials and Methods of Individualizing Instruction (S)

3 hrs. cr.

This course provides an introduction to the concepts, methods, and materials necessary to implement a program of individual instruction in the elementary or secondary school. Useful for those designing learning programs for exceptional children. Prerequisite: Educational Psychology and Structures of Teaching.

13.1202-442—Student Teaching-Elementary (F,S)

8 hrs. cr.

Participation under supervision, in teaching on the elementary level in an off-campus school. Prerequisites: 100 semester hours with a grade point average of 2.5, admission to the program of teacher education, and Educ. 320. Course assignments will include full-time supervised teaching for one-half of the semester. Students whose last names begin with the letters A-L should plan to enroll in first semester: M-Z in second semester. Conferences are scheduled as needed. Specific assignment is made by the Department of Education. Arrangements for assignment are to be made in semester preceding the actual student teaching block.

13.1202-444—Student Teaching-Special Education (F,S) 4-8 hrs. cr.

This course in which the trainee student teaches the handicapped child shall immediately follow Educ. 442 or 462 or 464. Prerequisite: See Educ. 442. Course assignment to consist of a minimum of 5 hours a week of student teaching for each one hour of credit per one-half semester. Conferences will be scheduled as needed.

13.1001-446—Practicum in Special Education (F,S)

3 hrs. cr.

Clinical experience directed toward providing students with an opportunity to work and interact with exceptional children in a variety of community facilities. Prerequisite: Ed. 324 and 3 hours of methods of teaching special education.

13.1205-462—Student Teaching-Secondary (F,S)

4-8 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with student teaching. Prerequisite: Educ. 330 or equivalent, fifteen semester hours in teaching field, and a minimum of 100 semester hours with a grade point average of 2.5. Assignment to consist of full-time teaching for one-half semester with professional courses to be taken during the other half of semester. Students whose last names begin with the letters A-L should plan to enroll in first semester; M-Z in second semester. Conferences are scheduled as needed. Specific assignment is made by Department of Education.

13.1205-464—Student Teaching-Combination (F,S) 8 hrs. cr.

Participation, under supervision, in teaching on the secondary and elementary levels in an off-campus school. Intended for those students in specialized area such as Art, Music, Psychology-Special Education, and Physical Education who are preparing to be certified for teaching their specialty at both levels. Curriculum, materials and methods integrated with teaching participation and observation. Assignments consist of a minimum five hours per week of participation and conferences for each hour of credit for one-half the semester. Specific assignments are made by Department of Education.

13.1315-470—Diagnostic and Remedial Reading (F,S) 2 hrs. cr.

A course of study to prepare the beginning remedial reading teacher and the regular class teacher to deal with remedial reading problems. Emphasis is on diagnosis of problems more clinical in nature with techniques, materials, and management being stressed. Prerequisite: EDUC 342, EDUC 343, and EDUC 474.

13.1205-471—Practicum in Diagnosis of Reading Difficulties

2 hrs. cr.

Practice of administering, interpreting, and reporting of diagnostic test results of reading difficulties. Prerequisites: EDUC. 342 or EDUC. 422, EDUC. 343, EDUC. 470, and EDUC. 474 or PSY. 471.

13.1315-472—Practicum in Remediation of Reading Difficulties

3 hrs. cr.

Practice of using and reporting results of remedial methods in a case study of reading difficulties. Prerequisites: EDUC. 342 or EDUC. 422, EDUC. 343, EDUC. 470, EDUC. 471.

# 13.0604-474—Educational-Psychological Testing in Special Education (S) 3 hrs. cr.

A comprehensive study of the various Psycho-Educational assessment techniques for diagnosis of learning problems of exceptional children, including educational, intelligence, and psychomotor. Emphasis will be placed on translating assessment data to remedial programs. (Same as Psy. 474). Prerequisites: Ed. 324, Psy. 310, Psy. 412.

# 13.9999-498—Seminar in Problems of Education (demand) 1-3 hrs. cr.

A seminar for upper division majors only. The seminar meets regularly each week. Meeting is equal to number of credit hours determined by the department for a given semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Advanced standing and consent of department head.

# 13.9999-499—Independent Study (F,S)

1-3 hrs. cr.

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by adviser and department head.

\*Students who are elementary education majors but who are certifying in special education must take 4 hours of student teaching in the regular elementary classroom i.e., (Educ. 442), and 4 hours of student teaching in the special classroom, i.e., (Educ. 444). During registration the student must ask for a 4 hour Educ. 442 card by line number and a 4 hour Educ. 444 card by line number.

\*All education majors must take 8 hours of student teaching.

#### **ENGLISH**

### School of Arts and Sciences

Gale, Department Head; Ackiss; Atkinson; Couch; Denniston; Greenlee; Harder; Lambert; Marlowe; Morgan; Preble; Saltzman; Short; Simpson; Walters

One of the advantages of an English major is that the subject matter and training in critical techniques are so comprehensive that career opportunities are infinite. Graduate school (including law, medicine, etc.), teaching, publishing, advertising, communications, writing, and business all offer opportunities for the English graduate. In fact, a recent publication ("English: The Pre-Professional Major" by Linwood E. Orange, MLA Publications) listed the following as areas in which English majors have worked in the field of business: aircraft, automotive, banking, brewing, chain stores, chemical and drug, clothing and textile, construction materials, electrical and electronics, food products, fuel, glass products, household equipment, insurance, machinery and tools, metals, office equipment, paper products, public transportation, and rubber. Positions held within these areas ranged from personnel relations to sales and marketing to public relations to management to advertising to editing and writing to research and investigation.

It is strongly recommended that all English majors (B.A. and B.S.E.) take Eng. 261, 262, 281, and 282, and it is also recommended that these courses be taken as early as possible in the student's career. Non-majors may find it beneficial to take one of these courses before attempting any upper-division literature course.

Requirements for a major in English for the Bachelor of Arts degree are 42 semester hours of English beyond freshman composition and must include Eng. 301 or 400, and either 216, 310, or 315. A minimum of 12 hours must be at the 300-400 level.

Requirements for a major in English for the Bachelor of Science in Education degree with English as one of two teaching fields (Plan A) consists of 30 semester hours of English (above freshman composition) and Education 422. Required English courses are Eng 301, 319, 330, 400; either 216, 310, or 315.

Requirements for a major in English for the Bachelor of Science in Education degree with English as the only teaching field (Plan B) consists of 42 semester hours of English (above freshman composition) and Education 422. Required English courses are Eng. 301, 319, 330, 400; either 216, 310, or 315.

Span 440 may be counted as an elective toward completing a major in English for either the Bachelor of Arts or Bachelor of Science in Education

degree.

Prerequisites: English 101 is a prerequisite to all English courses except Eng. 100 or 111. English 102, 103, or 111 is a prerequisite to all upper division English courses.

General Education requirements in literature can be met with any English course numbered 150 or above with the exception of Eng. 216, 301, 310, 315,

319, 325, 400 and 498.

However, students attempting an upper-level course as their first literature course should consult with the instructor before enrolling.

23.0401-100—Basic Composition (F,S)

5 hrs. cr.

A course designed for students whose placement scores indicate a need for special help and individual attention. The course concentrates on basic grammar, punctuation, and usage and the principles of effective writing. A student who completes the course with a **D** should enroll in English 101 before attempting English 102.

23.0401-101—Freshman Composition I (F,S)

3 hrs. cr.

A study of the principles of effective writing based upon expository models. Successful completion of the goals of the course content permits the student to enroll in Eng. 102. Students demonstrating exceptional ability as indicated by placement scores may be permitted to substitute Eng. 111.

23.0401-102—Freshman Composition II (F,S)

3 hrs. cr.

Continued development of writing skills. Initiation, development, and completion of a research paper.

23.0401-103—Technical Writing (S)

3 hrs. cr.

A second-semester composition course focussed on the practical demands of on-thejob writing. Prerequisite: English 101, with grade of a C or better. This course substitutes for English 102, except for majors in the school of Business or for the Bachelor of Science in Education degree.

23.0401-111—Advanced Freshman Composition (F)

3 hrs. cr.

For freshmen demonstrating exceptional proficiency on placement tests. With a grade of C or better in English 111, a student automatically receives three hours credit for Eng. 101, thereby satisfying the six-hour composition requirements. However, a D in Eng. 111 necessitates taking Eng. 102.

23.0101-150—Introduction to Literature (F,S)

3 hrs. cr.

An examination of literary themes reflected in the genres of prose, poetry, drama, and film; critical techniques and approaches.

23.0501-216—Creative Writing (S)

3 hrs. cr.

Writing of prose, poetry, and drama. A study of the writer's roles and technical approaches to literature in order to develop creative writing skills.

23.0301-261—Masterpieces of World Literature (F.S)

3 hrs. cr.

Selected literature through the Renaissance, excluding British and American literature.

23.0301-262—Masterpieces of World Literature (F,S) 3 hrs. cr. Selected literature from the Renaissance to the present, excluding British and American

Selected literature from the Renaissance to the present, excluding British and American literature.

23.0801-271—English Literature (F,S) 3 hrs. cr. Survey of English literature from its beginnings to the Romantic Movement.

23.0801-272—English Literature (F,S) 3 hrs. cr. Survey of English literature from the Romantic Movement to the present.

23.0701-281—American Literature (F,S) 3 hrs. cr.
A survey of American literature from its beginnings to the Civil War.

23.0701-282—American Literature (F,S) 3 hrs. cr.
A survey of American literature from the Civil War to the present.

23.0101-298—Explorations in Literature (Demand) 3 hrs. cr.
Studies in a variety of literary subjects. Topic open. English majors may not count the course more than once toward their English hours requirements.

23.0101-301—Modern Grammar (F) 3 hrs. cr.

A survey of the major descriptive approaches to English grammar, with some attention devoted to the topics of usage, dialect, and practical applications.

23.0101-305—The Short Story (F,S)
An in-depth study of the short story.

23.0401-310—Professional Writing (F) 3 hrs. cr.

An advanced course focused on the technical writing demands of professional occupations.

23.0401-315—Exposition (F) 3 hrs. cr.
The techniques of factual writing. Recommended for all students, especially those planning professional careers. Prerequisite: 6 hours composition.

23.0401-319—Composition for Teachers (S) 3 hrs. cr.
For prospective teachers of English. A review of grammar, practice in writing, and the

theory of teaching writing.

23.0101-325—Children's Literature (S)

3 hrs. cr.

A reading, lecture, and observation course for elementary education students, including evaluation of children's literature, its historical development, and its uses in the elementary school. Does not count toward an English major and does not meet general education literature requirements.

23.0101-330—Literature for Adolescents

An extensive reading course for English education students including evaluation of adolescent literature, some methodology for classroom use, and a major unit on minorities literature.

23.0701-340—Black American Literature (S-Even) 3 hrs. cr. Writings by Black Americans.

23.0701-345—The American Novel (S-Even) 3 hrs. cr.
Representative works of authors such as Hawthorne, Melville, Twain, and Faulkner.

23.0701-350—Recent American Fiction (F-Odd)

The major movements in American fiction since World War II.

23.0101-360—Twentieth Century Drama (F-Odd)

Plays in English from Shaw to the present.

3 hrs. cr.

23.0101-370—Twentieth Century Poetry (S-Even)
From Yeats to the present. (Formerly English 481.)

3 hrs. cr.

23.0801-380—The English Novel (S-Even)

3 hrs. cr.

1700 to the present, featuring representative works from authors such as Austen, Dickens, and Joyce.

23.0801-400—History of the English Language (S)

3 hrs. cr.

The ancestors of English and the effect of other languages, peoples, and cultures upon its development. Phonology, morphology, syntax, and usage of the language throughout its history.

23.0801-410-Medieval English Literature (S-Even)

3 hrs. cr.

Literature of England in the Anglo-Saxon and Middle English periods. Emphasis upon Chaucer.

23.0801-415—Renaissance Non-Dramatic Literature (F-Odd) 3 hrs. cr. English poetry and prose from 1500 to 1660.

23.0801-420—English Drama to 1800 (S-Even)

3 hrs. cr.

Study of English drama from the beginnings to 1800 (excluding Shakespeare).

23.0801-425—Restoration and Eighteenth Century English Literature (F-Odd)

3 hrs. cr.

The rise of neoclassicism, the enlightenment, and the decline of neoclassicism in literature from 1660-1798, Dryden to Gray.

23.0801-430—The Romantic Period (S-Even)

3 hrs. cr.

English literature from 1798 to 1832. Literary tendencies and representative authors from Wordsworth through Keats.

23.0801-435—The Victorian Period (F-Odd)

3 hrs. cr.

English literature from 1832 to 1901. Literary tendencies and authors such as Tennyson, Browning, and Arnold.

23.0801-450-Shakespeare (F)

3 hrs. cr.

Selected comedies, histories, tragedies, and non-dramatic poems.

23.0101-480—Literary Criticism (F-Odd)

3 hrs. cr.

A study of the major schools of criticism including historical background and the major spokesmen for each school.

23.0101-498—Seminar in Literature (Demand)

3 hrs. cr.

For advanced English majors or by permission of department head. Topic open.

23.0101-499—Independent Study (F,S)

1-3 hrs. cr.

Individually directed study in selected areas for advanced English majors. Prerequisite: a grade point average of 3.0 in English. Registration must be approved by adviser, department head, and school dean.

# **ENVIRONMENTAL HEALTH TECHNOLOGY**

# **School of Technology**

G. Elick, Gibson, Tillman

The college offers the four year Bachelor of Science in Environmental Health Technology. An Associate of Science degree (two year) in Environmental Health Technology is described below. Two options in the Bachelor of Science in Environmental Health Technology program are available:

Option I Water and Wastewater Management

Option II Institutional and Community Health

Option I requires three academic years of study at Missouri Southern State College preceded or followed by successful completion of three trimesters at the Water and Wastewater Division of Crowder College, Neosho, Missouri 64850. Required courses besides General Education include: EH 110 or Bio 101, Bio 112, Bio 221, Bio 211 or Bio 231, EH 300, EH 312, EH 370, Bio 306, or Bio 431, Bio 442 or approved substitute, Chem 101, Chem 102, Chem 201, Chem 300, Acct 201, Econ 201, Math 140, MM 350 and MM 352. The student holds membership in only one student body at a time. At M.S.S.C. the student pays the same fees as any other student during the time here unless he or she is from another state.

Option II requires four complete academic years at Missouri Southern State College including a semester practicum. Plans for the practicum should be made with the student's advisor during the spring semester of the junior year at M.S.S.C. Required courses besides General Education include: EH 110 or Bio 101, Bio 112, Bio 122, Bio 211 or Bio 231, EH 300, EH 312, EH 370, Bio 306 or Bio 431, Bio 361 or Bio 442, Bio 402 or Bio 481, Chem 101, Chem 102, Chem 201, Chem 300, Acct. 201, Econ 201, Math 140, MM 350, MM 352 and EH 450.

The Associate of Science degree in environmental health technology is in affiliation with the Water and Wastewater Technical Division of Crowder College, Neosho, Missouri. The combination of Missouri Southern requirements that are basic to all combined associate degrees, the specific courses required for the associate degree in environmental health technology, plus the completion of a minimum of 3 trimesters of approved study at the Water and Wastewater Technical Division of Crowder College, Neosho, Missouri will qualify the student for the Associate of Science degree.

The specific courses required at Missouri Southern, in addition to the general education requirements, are Chem 101, Chem 102, Bio 101 and 211 (or Bio 312 for students completing courses at the Water and Wastewater Technical Division of Crowder College prior to attending Missouri Southern State College)

Note that a student may complete the requirements at either school first. He is, however, a member of only one student body at a time.

#### 26.0101-110—Man and Environment (F,S)

4 hrs. cr

A survey of environmental aspects of Biology including pollution, land use, population, energy and organismic responses to these problems. Cellular, systemic, and genetic mechanisms are included. Three lectures and one 2 hour lab per week. Fulfills general education requirement for biology.

#### **ENVIRONMENTAL HEALTH TECHOLOGY**

18.0799-298—Selected Topics in Environmental Health 1-8 hrs.

Study of special topics in Environmental Health. Each offering of the course will be on a specific topic not normally included in another course. Prerequisite: EH 110 or Bio 101, Bio 112 and Bio 122.

40.0601-300—Earth Environments (Geol 300)

4 hrs. cr.

A course describing aspects of the solid earth, the liquid environments of earth and our atmosphere. Interactions of these and their relationships to human society will also be discussed. Pre-requisite: Phys 100.

26.0603-312—Environmental Biology (F)

4 hrs. cr.

A study of environmental factors and their interactions with living things. Emphasis is placed on human ecology and wise natural resource utilization. Three lectures and one 2 hour lab per week. Pre-requisite: Phys 100, Bio 101, Math 110, or permission of the instructor.

26.0704-370—Environmental Health (S)

4 hrs. cr.

A course concerned with contemporary environmental health problems and public protection measures. These will include public health disease prevention, vector control, etc. Three lectures and one 2 hr. lab per week. Pre-requisite: Bio 211 or 231, Junior standing in science or permission of instructor.

18.0799-450—Practicum in Environmental Health (F,S)

12 hrs. cr.

A course designed to allow students to gain experience through actual observation and work at health facilities, health regulation agencies and/or industrial plants where environmental health is a viable concern. Periodic meetings petween the MSSC coordinator, the cooperating institution and the student will be required. The student should not be employed in any job that will prevent full-time, maximum concentration on the academic practicum. Pre-requisite: Senior standing in the environmental health or biology curricula.

18.0799-498-Seminar in Environmental Health

1-3 hrs. cr.

A seminar for upper division environmental health and biology majors only. The class will meet regularly a minimum number of hours. The course is designed to give specialized instruction in some discipline of environmental health not covered in other courses. Pre-requisite: Junior standing; 20 hours in environmental health and/or biology and a minimum GPA of 2.5 in environmental health and/or biology, or permission of the instructor required.

18.0799-499-Problems in Environmental Health

1-3 hrs. cr.

Consists of individual work under the supervision of a staff member, with the credit and hours to be arranged. Problems may be undertaken in any field of environmental health, with adequate preparation and the consent of the supervising instructor, coordinator, department head and school dean. Pre-requisite: A minimum GPA of 3.0 in 20 hours of environmental health and/or biology.

18.0799-498-Seminar in Environmental Health

3 hrs. cr.

For advanced environmental health students or by permission of department head. Topic open.

18.0101-499—Independent Study

1-3 hrs. cr.

Individually directed study in selected areas for advanced Environmental Health students. Registration must be approved by the adviser, department head, and the school dean.

#### FOREIGN LANGUAGES

# School of Arts and Sciences Department of Communications

Massa, Department Head Bodon; Carney; Peterson

Training in foreign languages enables a student to prepare for employment as an interpreter, teaching at the high school level, participating in bi-lingual programs, and teaching English as a second language. Also, there are career opportunities in industry both in the United States and abroad. Combining a major in Spanish with a major in business, in political science or in public communications is especially valuable.

Requirements for a major in Spanish for the Bachelor of Arts degree are 40 semester hours. Included are Span. 101, 102, 201, 202, 319, 320, 322, 440 and two hours of 499; Pol. Sc. 321 or 332; and Comm. 493 or Geog. 412.

Requirements for a major in Spanish for the Bachelor of Science in Education degree with Spanish as one of two teaching fields (Plan A) are 32 semester hours in Spanish. Included are Span. 101, 102, 201, 202, 319, 320, 332 and 440

Requirements for a major in Spanish for the Bachelor of Science in Education degree with Spanish as the only teaching field (Plan B) are 40 semester hours. Required are 34 semester hours in Spanish, including Span. 101, 102, 201, 202, 319, 320, 332, 440, and two hours of 499. Also required are Pol. Sc. 321 or 332; and Comm. 493 or Geog. 412.

For all degree programs, a major must (1) demonstrate proficiency in the language and (2) must participate in five consecutive semesters of the tutorial program indicated for Span. 201, 202, 319, 320 and 332.

#### FRENCH

- **16.0901-101—Beginning French (F)**Conversation, pronunciation, essentials of grammar and diction. Language laboratory required.
- **16.0901-102—Intermediate French (S)**Spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required.
- **16.0901-201—Readings in French Literature (F)**Intermediate reading. Discussion of literature in French. Emphasis on vocabulary building. Grammar review. Prerequisite: Fren. 102 or equivalent.
- **16.0901-202—Advanced Readings in French Literature (S)** 3 hrs. cr. Representative works read and discussed in French. Short stories, a novel and poetry. Prerequisite: Fren. 201 or equivalent.
- **16.0901-301—French Composition (Demand)**Practice in writing French accompanied by a thorough study of grammar and syntax. Prerequisite: Fren. 202 or equivalent.
- **16.0901-302—Advanced French Composition (Demand)**3 hrs. cr.

  Practice in writing French compositions. Thorough study of grammar, syntax, and idiomatic expressions. Prerequisite: Fren. 301.

#### 16.0901-321—Survey of French Literature (Demand)

3 hrs. cr.

French literature from its origin through the seventeenth century. Prerequisite: Fren. 302 or equivalent.

#### 16.0901-322—Survey of French Literature (Demand)

3 hrs. cr.

French literature of the eighteenth, nineteenth and twentieth centuries. Prerequisite: Fren. 321.

#### **GERMAN**

#### 16.0501-101-Beginning German (F)

5 hrs. cr.

Stresses conversation, pronounciation, essentials of grammar and diction. Language laboratory required.

#### 16.0501-102—Intermediate German (S)

5 hrs. cr.

Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required.

#### 16.0501-201—Reading in German Literature (F)

3 hrs. cr.

Intermediate reading. Discussion of literature. Emphasis on vocabulary building. Grammar review. Prerequisite: Ger. 102 or equivalent.

# 16.0501-202—Advanced Readings in German Literature (Demand)

3 hrs. cr.

Representative works are read and discussed in German with emphasis on conversation, syntax and literary significance. Prerequisite: Ger. 201 or equivalent.

#### **SPANISH**

#### 16.0905-101—Beginning Spanish (F,S)

5 hrs. cr.

A principally oral-aural method is used to develop concurrently the skills of speaking, understanding, reading, and writing in Spanish. The emphasis is on developing speaking skills through the structured presentation of basic grammatical principles, and vocabulary, and through conversational sessions. Five classes; laboratory required, consisting of listening to tapes to develop basic language patterns and to reinforce pronunciation skills.

#### 16.0905-102—Intermediate Spanish (F,S)

5 hrs. cr.

Continuation of 101. Basic grammar continued. Acquisition of a more thorough understanding of the fundamentals of Spanish. In addition to continued oral practice through conversational sessions, growing emphasis will be placed on reading and writing. Five classes; laboratory required, consisting of listening to tapes to develop basic language patterns and to reinforce pronunciation skills.

#### 16.0905-201—Readings and Conversations (F,S)

3 hrs. cr.

This course gives maximum attention to the active skills of understanding and speaking. Discussion centers on current issues and cultural reading selections. Some translation work acquaints the student with the main syntactical differences between Spanish and English. Explanations are given of the major aspects of phonology and the basic norms of morphology in order to facilitate oral fluency and vocabulary acquisition. One hour of laboratory work is required. The laboratory work for this level provides students with active conversational practice. Students conduct structured conversational sessions.

# 16.0905-202—Introduction to Hispanic Literature and Culture(F,S)

3 hrs. cr.

This course gives maximum attention to the active skills of understanding and speaking through the examination of short literary selections by Peninsular and Spanish American writers as presented in their cultural context. Readings also in Spanish Civilization. One

hour of laboratory work is required. The laboratory work for this level provides the students with active conversational practice. Students conduct structured conversational sessions.

#### 16.0905-319-Survey of Peninsular Literature

5 hrs. cr.

An introductory course designed to acquaint the student with Spain's literary history and important representative works and writers from El Cid to the present. Conducted in English and Spanish. One hour of laboratory work is required. The laboratory work for this level provides the students with active conversational practice. Students conduct structured conversational sessions.

#### 16.0905-320—Spanish Syntax and Composition

5 hrs. cr.

Practice in writing Spanish accompanied by a thorough study of grammar and syntax with emphasis on subtle elements of idiomatic usage. One hour of laboratory work is required. The laboratory work for this level provides the students with active conversational practice. Students conduct structured conversational sessions.

#### 16.0905-332—Introduction to Spanish American Literature (S) 3 hrs. cr

An introductory course designed to acquaint the student with the major periods, movements, themes, genre and styles of Spanish American Literature with focus on both its artistic and social importance. Includes: history, epic and lyrical poetry, short story and some essay. Conducted in Spanish. One hour of laboratory work is required. The laboratory work for this level provides the students with active conversational practice. Students conduct structured conversational sessions.

#### 16.0905-440—The Novelistic Tradition: From Cervantes to the Anti-Realism Tendencies in Modern Fiction

3 hrs. cr.

This course focuses on problems of structure, narrative technique, and aesthetic concepts underlying prose fiction as seen through Cervantes, Rabelais, Flaubert, Balzac, Dickens, Kafka, Garcia-Marquez and Borges. Conducted in English. Open to non-majors. Can be counted toward a major in English but not as a part of the General Education requirements. Prerequisites: Eng. 101 and 102 or 103.

#### 16.0905-499—Independent Study (F,S)

1-3 hrs. cr.

Individually directed study in selected areas for advanced majors in Spanish. Prerequisite: A grade point average of 3.0 in the major field and 15 hours of Spanish. Registration must be approved by the advisor, department head, and school dean.

#### GENERAL SCIENCE

### School of Arts and Sciences Department of Physical Science

Certification for teaching general science at the 7-12 grade levels is obtainable at MSSC. Students preparing for a Bachelor of Science in Education with majors in biology, chemistry, physics, or physical science should include at least three credit hours of geology and three credit hours in meteorology in their program. General science as a second teaching field for other majors requires 21 credit hours in science with at least three credit hours in geology and three credit hours in meteorology. Additional courses in biology (8 hours), chemistry (5 hours), and physics (5 hours) are likewise required. Students with this option in mind should notify their faculty adviser.

#### **GEOGRAPHY**

# School of Arts and Sciences Department of Social Sciences

J. Conboy, Department Head; Smith

Geography offers students a variety of employment possibilities. These range from positions in secondary education to opportunities in government and business planning.

The Department of Social Sciences offers a core curriculum in geography as a support area for Social Sciences majors and other interested students. While a major is not offered at this time, sufficient hours to meet Social Studies teacher certification standards and to satisfy potential non-teaching employers' requirements are available.

#### 45.0701-211—Regions and Nations (F,S)

3 hrs. cr.

A survey of the peoples of the earth and how their activities are influenced by climate, topography and natural resources.

#### 45.0701-298—Topics in Geography (Demand)

3 hrs. c

Special geography topics of current interest to the student. Subjects and instructors are changed each semester. Students are encouraged to submit areas of interest to the Social Sciences Department.

#### 45.0701-311—Political Geography (Demand)

3 hrs. cr.

A study of the geographic factors which have influenced international relations and the policies of nations as political units. Geopolitics, religion, racial and ethnic groupings and other factors which contribute to unity or disunity will be emphasized.

#### 45.0701-322—Economic Geography (Demand)

3 hrs. cr.

A study of world commodities and the geographic factors which affect their production and make them significant to the world economy.

# 45.0701-412—Geography and Culture of Latin America (Demand)

3 hrs. cr.

A study of the cultural and physical regions and natural resources of South America, Latin America, Central America and the Carribbean Islands. Special emphasis is on current problems and relations with the United States.

# 45.0701-422—Geography of the United States and Canada (Demand)

3 hrs. cr.

A geographic analysis of the United States and Canada with emphasis on regional variations of social, economic and physical phenomena.

#### 45.0701-498—Seminar in Geography (Demand)

1-3 hrs. cr.

The study and analysis of selected topics in regional, urban-economic, cultural or physical geography.

#### **GEOLOGY**

#### School of Arts and Sciences Department of Physical Science

Baiamonte, Department Head; Elick

Geology courses are used to supplement other major areas and for teacher certification in General and Earth Science.

40.0601-110-Introduction to Geology (S)

5 hrs. cr.

The materials of the earth and those forces producing physiographic changes. Three lectures and two, 2-hour laboratory or field trips a week.

40.0601-300—Earth Environments (Demand)

4 hrs. cr.

A course describing aspects of the solid earth, the liquid environments of earth and our atmosphere. Interactions of these and their relationships to human society will also be discussed. Prerequisite: Phys. 100.

40.0601-320— Historical Geology (Demand)

4 hrs. cr.

A comprehensive study of the history of the earth, the fossil record, and physical features resultant from earth dynamics of the past. Prerequisites: Phys. 100, Geol. 110.

40.0601-498—Studies in Geology (Demand)

1-3 hrs. cr.

A seminar for upper division students only. The class will meet regularly a minimum number of hours each week equal to the number of credit hours. The course is designed to give specialized instruction in some discipline of geology not normally covered in other courses. Prerequisite: junior standing, Geol. 110 and a minimum GPA of 2.5 in 8 hours of biology and 8 hours of chemistry. Permission of the instructor required.

40.0601-499—Problems in Geology (Demand)

1-3 hrs. cr

Consists of individual work under the supervision of a staff member with the credit and hours to be arranged. Problems may be undertaken in any field of geology with adequate preparation and the consent of the supervising instructor. Prerequisite: a minimum GPA of 3.0 in 20 hours of science, Geol. 110, and a proven past interest in geology.

#### **HISTORY**

# School of Arts and Sciences Department of Social Sciences

J. Conboy, Department Head; Holman; Markman; Renner; Smith; Teverow

A Bachelor of Arts degree with a major in history prepares students for entry level career positions in business, governmental and community service fields, and entry into graduate programs of the social sciences and law. A Bachelor of Science in Education with a major in Social Sciences — history emphasis — certifies a student to enter professional teaching at the secondary school level.

Requirements for a major in history for a Bachelor of Arts degree are 30 semester hours of history including Hist. 110, 120, 130, 140, 6 semester hours of upper division U. S. History, 6 semester hours of upper division European History and 6 semester hours of upper division history electives. Hist. 498 must

be included among the history electives.

Requirements for a major in social sciences — history emphasis — for the Bachelor of Science in Education degree with social sciences as the only teaching field (Plan B) are 48 semester hours. Included are Hist. 110, 120, 130, 140, 6 semester hours of upper division U.S. History, 6 semester hours of upper division European or oriental history and 6 semester hours of upper division history electives; PSc. 120 and 3 semester hours of upper division political science; Econ. 180 or other economics course; Geog. 211; Soc. 110 and 3 semester hours of upper division sociology. Hist. 498 is highly recommended. Please refer to page 106 for an explanation of the Teacher Education Requirements. Elementary Education majors who desire an emphasis in Social Sciences should contact the Department of Education.

Hist. 110 or 120 is a General Education requirement for all academic majors and degrees. Hist. 130 and 140 are designed to fulfill elective General Education requirements.

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\*History 110 or 120 is a prerequisite for all upper division U.S. History

\*History 130 or 140 is a prerequisite for all upper division European History courses.

#### I. U.S. HISTORY COURSES

#### 45.0801-110-United States History 1492-1877 (F.S)

3 hrs. cr.

A survey of the United States from the era of discovery through reconstruction. Meets the General Education requirement for all majors.

#### 45.0801-120—United States 1877 to Present (F,S)

A survey of the economic, social and political development of the United States from 1877 to the present. Meets the General Education requirement for all majors.

# 45.0801-298—Topics in History (Demand)

3 hrs. cr.

Special historical topics are examined. Students are encouraged to submit areas of personal interest to guide in the selection of the topics.

#### 45.0801-305-United States Social and Intellectual History (Demand)

3 hrs. cr.

A study of ideas that have influenced the intellectual, cultural and social aspects of United States from colonial times to 1877.

#### 45.0801-310-United States Social and Intellectual History (Demand)

3 hrs. cr.

A study of the society and ideas of the United States during the period of its great industrial expansion and emergence as a major world power.

#### 45.0801-315—Economic History of the United States (F, Even) 3 hrs. cr.

A study of the development of the American economy and its related institutions from the early national period to the present.

### 45.0801-325—The American Frontier (F,Odd)

3 hrs. cr.

The westward expansion of the United States and its effects upon the social, political and economic institutions until the close of the frontier in 1890.

#### 45.0801-330—History of the American Indian (Demand) 3 hrs. cr.

A study of the social, political, diplomatic, military and legal history of the native American society.

#### 45.0801-335—Diplomatic History of the United States to 1900 (Demand)

3 hrs. cr.

A study of the diplomatic relations of the United States and the related development of its foreign policy from 1775 to 1900.

#### 45.0801-340—Twentieth Century Diplomacy (S,Odd)

3 hrs. cr.

An investigation of United States diplomacy and the present-day world. The course emphasizes the role of the United States in world affairs.

#### 45.0801-345—Age of Jefferson and Jackson (F,Odd)

3 hrs. cr.

The study concentrates on early political development in the United States. It traces the evolution of the presidency over the first years of the new government, the triumph of Jeffersonian ideas, social threads and the rise of nationalism.

45.0801-350—Civil War and Reconstruction (S,Odd)

3 hrs. cr.

A study of the causes of the Civil War, slavery and reform movements before the Civil War. Students will trace the development of reconstruction and political developments of the era.

45.0801-355—The South (F, Even)

3 hrs. cr.

A survey of the social, economic, political and intellectual history of the southern United States concentrating on tracing the distinctive characteristics of the section and attempting to discover how a consciousness of the region's separateness evolved.

45.0801-360—History of Missouri (F,Odd)

3 hrs.

A study of Missouri's growth from its early settlement to the present. Emphasis is placed upon political, economic, institutional and social development.

45.0801-365—United States Colonial History (Demand)

hrs. c

A study of colonial development from 1492 to 1781. Early colonization and British imperial policy are emphasized along with social, cultural, political, and economic growth. Also, the Revolutionary War period is covered.

45.0801-400—United States Military Experience 1775 to Present (S)

3 hrs. cr.

A broad survey of American military history. The course covers major wars and other activities of the armed forces with emphasis on general military policy, strategy, tactics, organization, and technology.

45.0801-405—The United States 1870-1920 (Demand)

3 hrs. cr.

A study of the United States at the turn of the century with the impact of the industrial revolution and its effect on social, political and economic institutions, the Progressive Movement and World War I.

45.0801-410—The United States Since 1920 (F, Even)

3 hrs. cr.

A concentration on the impact of politics, diplomacy and economic trends of the United States since 1920.

45.0801-420—United States Constitutional History (Demand) 3 hrs. co

A study of the growth and development of the United States Constitution from 1787 to the present.

45.0801-498—Seminar in History (F or S)

3 hrs. cr.

The advanced topics are those not covered in other history offerings. Emphasis is placed on the student's ability to research, assimilate and present new areas of knowledge. Prerequisite: junior or senior status; prior instructor consultation is advised.

45.0801-499—Independent Study (F,S)

1 to 3 hrs. cr.

An individualized project directed by the instructor/advisor with approval of the Department Head and the Dean of the School of Arts and Sciences prior to enrollment in the study. Advanced standing in the major field and a minimal grade point average of 3.0 are required.

#### **II. EUROPEAN HISTORY COURSES**

45.0801-130—Western Civilization to 1660 (F,S)

3 hrs. cr.

A survey of the development and progress of western civilization from prehistoric times through 1660. The study surveys the contributions of the early peoples to civilization, as well as feudalism, the Renaissance and the Reformation. May be used as a General Education elective.

45.0801-140—Western Civilization 1660 to Present (F.S)

3 hrs. cr.

A survey of western societies from the Age of Absolutism to the Nuclear Age. Emphasis is placed on the cities, the nation-state, industrialization and the impact of revolutions and two World Wars. May be used as a General Education elective.

45.0801-298—Topics in History (Demand)

3 hrs. cr.

Special historical topics are examined. Students are encouraged to submit areas of personal interest to guide in the selection of the topics.

45.0801-307—History of East-Central Europe (Demand)

A survey of the history and development of continental Europe between the Baltic and Aegean Seas. A course designed to familiarize the student with the varied peoples and governments and the importance of this area in the modern world.

45.0801-320—Medieval History (S, Even)

3 hrs. cr.

A study of Europe from the end of the Roman Empire to c. 1500. Emphasis is placed on the significant aspects of the period such as feudalism, the Church, the Crusades and the origins of the Renaissance.

45.0801-369—Nineteenth Century Europe (Demand)

Examination of the major alterations of European society during this century. Emphasis on industrialization, imperialism, revolutions, rise of socialism/communism, middle-class liberal capitalism, individual national events.

45.0801-370—Twentieth Century Europe (S,Odd)

3 hrs. cr.

A survey approach with emphases on World Wars I and II, the League of Nations, the United Nations, totalitarian systems and current European/world problems.

45.0801-375—English History to 1660 (F, Even)

3 hrs. cr.

A survey of the rise and development of the English people from the Celts to the Stuart Restoration. Political, social and cultural adaptations are examined.

45.0801-380—English History 1660 to Present (S,Odd)

3 hrs. cr. A survey of English people and institutions from the restoration of Charles II to the present. Concentration placed on the emergence of modern Parliamentary democracy, the industrial revolution, the Empire and current position of England in world affairs.

45.0801-385—History of Russia and the Soviet Union (F,Odd)

A survey study of the history of Russia and the Soviet Union from pre-Tsarist time to the present. Emphasis will be placed on the land and the people, national characteristics and political institutions. The nineteenth and twentieth centuries are given special consideration.

45.0801-390—History of Germany (S,Odd)

A survey study of the social, political, military and economic history of Germany, with major concentration on the post 1519 period. Emphasis is placed on the decline of the Medieval Empire, princely absolutism, national unification, Weimar Republic, Third Reich, and post World War II.

45.0801-425—The Renaissance and the Reformation 1300-1650 (Demand)

3 hrs. cr.

A study of the political, economic, religious and social events in Europe as results of the Renaissance and the Reformation. The examination traces and analyzes the rise of the state system and monarchies, intellectual and artistic advancements and the split of the Roman Catholic Church with the rise of Protestantism.

45,0801-435—The Era of the French Revolution and Napoleon (F,Even)

3 hrs. cr.

European events and alterations resulting in the development of the modern western world during the late eighteenth and early nineteenth centuries as response to the French Revolution and Napoleon Bonaparte. Attention is devoted to theories, causes and effects of revolutions.

45.0801-440—European Intellectual History (S, Even)

3 hrs. cr

A study of the intellectual, cultural and social development in Europe from the Italian Renaissance to the present. Examination includes the rise of scientific thought, the Enlightenment, Romanticism, nationalism, political ideologies, social reforms, and existentialism.

45.0801-450—English Constitutional History (Demand) 3 hrs. cr.

The development of English political and legal institutions with emphasis on the Anglo-Norman background, the rise of parliament, Tudor absolutism, the Stuart period of revolution, development of the Cabinet, nineteenth century democratization, and evaluations resulting from the crisis of the Twentieth Century.

45.0801-498-Seminar in History (F or S)

3 hrs. cr.

The advanced topics are those not covered in other history offerings. Emphasis is placed on the student's ability to research, assimilate and present new areas of knowledge. Prerequisite: junior or senior status; prior instructor consultation is advised.

45.0801-499—Independent Study (F,S)

1-2-3 hrs. cr.

An individualized project directed by the instructor/advisor with approval of the Department Head and the Dean of the School of Arts and Sciences prior to enrollment in the study. Advanced standing in the major field and a minimal grade point average of 3.0 are required.

### III. ORIENTAL HISTORY COURSES

45.0801-298—Topics in History (Demand)

3 hrs. cr.

Special historical topics are examined. Students are encouraged to submit areas of personal interest to guide in the selection of the topics.

45.0801-415—History of China (F, Even)

3 hrs. cr.

A survey of modern China. Emphasis is placed on Chinese society, political developments and relations with the West in the nineteenth and twentieth centuries.

45.0801-430—History of Japan (Demand)

3 hrs. cr.

A survey tracing Japan's history from the middle of the nineteenth century to the present. Attention is given to Japan's contact with the West.

45.0801-498—Seminar in History (F or S)

3 hrs. cr.

The advanced topics are those not covered in other history offerings. Emphasis is placed on the student's ability to research, assimilate and present new areas of knowledge. Prerequisite: Junior or Senior status; prior instructor consultation is advised.

45.0801-499—Independent Study (F,S)

1-2-3 hrs. cr.

An individualized project directed by the instructor/advisor with approval of the Department Head and the Dean of the School of Arts and Sciences prior to enrollment in the study. Advanced standing in the major field and a minimal grade point average of 3.0 are required.

#### **INDUSTRIAL ARTS**

# School of Technology

Adams, Barrow, Morgan, Nickolaisen, Sutton

The Industrial Arts curriculum leads to the degree of Bachelor of Science in Education with a major in Industrial Arts. The student must complete the required Industrial Arts courses listed below, meet the general education of the College, and complete the professional education requirements for a teaching certificate.

Industrial Arts majors should apply to the Department of Education for admission to teacher education during the second semester of their sophomore year. The Teacher Education section of this catalog should be consulted for criteria for admission to the teacher education and to the professional semester.

# Option I Major in Industrial Arts

A major in Industrial Arts requires the completion of the General Education courses (See Page 55) teacher education courses, plus 39-42 semester hours of Industrial Arts courses including: 9 hours of Drafting, 7 hours of Machine Technology, 6 hours of Electricity/Electronics (IA 321, IA 322), 8 hours of Wood (IA 300, IA 301) 3 hours of Power Technology (IA 340), 3 hours of Plastics (IA 310) and 3 hours of Shop Organization and Management (IA 335).

These courses meet the Missouri Certification requirements to teach Industrial Arts in Grades K-12.

# Option II Minor in Industrial Arts

A person choosing a single teaching field may also earn a minor by completing 27 semester hours of Industrial Arts courses consisting of the following: 6 hours of Drafting, 3 hours of Power Technology (IA 340), 3 hours of Electricity (IA 321) 5 hours of Machine Technology (MACH 100) 4 hours of Wood (IA 300) 3 hours of Plastics (IA 310) and 3 hours of Shop Organization and Management (IA 335). These courses meet the Missouri Certification requirements to teach Indsutrial Arts in Grades K-9.

# 13.1309-300—Woodworking and Wood Construction (F) 4 hrs. cr.

A study of the basic woodworking tools and machines and their safe and efficient use and care with special attention given to the designing, construction, and finishing of projects involving the use of the tools and machines studied. One hour lecture; six hours laboratory per week.

### 13.1309-301—Wood Technology, Processes and Products (S) 4 hrs. cr.

A study of wood technology—including manufacturing of lumber, seasoning, grading, buying, properties, structure and characteristics of wood. A study of the special processes and techniques and products used and produced in the woodworking industry including wood lamination, peg diffusion, wood flour and particle moulding, wood plastic composition (WPC), ammonia bending, mass production, use of jigs and fixtures. Students will design and finish projects involving use of special processes, techniques, jigs, fixtures. One hour lecture six hour laboratory per week.

#### 13.1309-310—Introduction to Plastics (S) 3 hrs. cr.

A general plastics course designed to develop a knowledge of the plastics industry; with an emphasis on current materials and processing techniques used in fabricating plastic products. One-hour lecture; four-hour lab per week. Prerequisite: Introduction to Machine Tool Processes, MACH 100.

13.1309-321—Industrial Electricity (F)

3 hrs. cr.

A study of the principles of electricity and related equipment with an application of these principles and equipment in industry. Emphasis is placed on safety in electricity, basic concepts, electrical quantities, common DC circuits, cells, batteries, magnetism, and basic measuring instruments with an introduction to alternating current, inductance, transformers, capacitance, resistance, generators, motors, application to residential and commercial wiring. Two hours lecture; two hours laboratory per week.

13.1309-322—Electricity-Electronics II (S)

3 hrs. cr.

A basic study of electronics, including the function of components, DC and AC theory, characteristics and applications of power supplies. Experimentation and project construction are included. Two hours lecture; 2 hours lab per week. Prerequisite: Industrial Electricity 321.

13.1309-335—Shop Organization and Management (F) 3 hrs. cr.

Types of shop organization, equipment, and supply; sources, selection and arrangement of equipment, shop plans, inventories, accounting records, reports, requisitions, and specifications. Three hours lecture per week. Prerequisite: At least 15 hours of Industrial Education.

13.1309-340—Power Technology (F)

3 hrs. cr.

A survey of various sources and applications of power and energy. Topics covered may include the internal combustion engine, solar, thermal, nuclear, electrical and other potential sources of power. Laboratory sessions will be directed toward application of basic concepts through demonstrations and activities such as small engine rebuilding, etc.

13.1309-298—Selected Topics in Industrial Arts (Demand) 1-8 hrs. cr.

Study of special topics in Industrial Arts. Each offering a course on a special topic or topics not normally included in another course. Prerequisites to be determined by the department of Industrial Arts and stipulated in syllabus.

13.1309-498—Seminar in Industrial Arts (Demand)

1-3 hrs. cr.

A seminar for upper division Industrial Arts majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission of instructor

13.1309-499—Independent Study in Industrial Arts (Demand) 1-3 hrs. cr.

Individually directed reading, research, and projects in selected areas of Industrial Arts for advanced majors. Scope, depth, and area of concentration and credit will be arranged upon entry into the course. Offered by arrangement. Prerequisite: Advanced standing in Industrial Arts field or permission of instructor.

# JOURNALISM DEPARTMENT

(See Communications Department)

#### LAW ENFORCEMENT

School of Technology

Seneker, Mosher, Richards, Spurlin, Terry, Whittle, Williams

The Associate of Science degree in Law Enforcement prepares students for entrance into police work, a field which has become highly specialized and complex at the local, state and national levels. Modern law enforcement responsibilities make academic preparation beyond the high school level essential.

Many law enforcement agencies have specific requirements regarding minimum age, height, weight, vision and other related requisites. Students interested in this field should check with appropriate agencies regarding their requirements. Students considering a major in this field should schedule a conference with the Director of Law Enforcement Programs before enrolling.

The Associate of Science in Law Enforcement requires the completion of the general education courses (see page 55) plus the following: PSc 120, Soc. 110, 210, 312, 351, Psy. 100, 221, HPER 160, 220, LE 100, 110, 150, 190, 200, 210, 250, and 290. Electives should be selected with advisor approval.

**43.0107-100—Introduction to Law Enforcement (F,S)**3 hrs. cr.

Municipal, county, state and federal police organizations. History and administration of justice. Responsibilities and opportunities in the field of law enforcement.

**43.0807-110—Police Organization and Administration (F)**2 hrs. cr.

Management operations, communications, budgeting, recruiting, training and public relations as they pertain to the local and state law enforcement agencies.

**43.0107-150—Interview and Report Writing (S)**2 hrs. cr.

The techniques of interviewing and writing the report. Legal considerations for criminal interrogations. Use of basic report forms and records systems.

43.0107-190—Supervised Police Work (Summer) 6 hrs. cr.
The student spends a specific amount of time in the local police department, the local sheriff's department, and with other area agencies learning the standard line activities. The purpose is to introduce the student to the actual duties of law enforcement officers. Prerequisite: LE 100, LE 110, LE 150.

**43.0107-200—Criminal Investigations (F)**Sundamentals of criminal investigation techniques including crime scene procedures, burglary, and death investigation. Includes collection, preservation, identification of evidence and overview of crime lab procedures.

**43.0107-210—Criminal Procedures (F)**3 hrs. cr.
Criminal law procedures from arrest through trial. Search and seizure, laws of evidence, review of pertinent supreme court decisions and related topics. The order of criminal trial.

43.0107-250—Criminal Law (S)

3 hrs. cr.

Criminal law purposes and functions; laws concerning arrest, search, and seizure.

Rights and duties of officers and citizens in relation to local, state and federal laws. The development, application and enforcement of laws.

43.0107-290—Police Supervision and Management (S) 3 hrs. cr.
Principles of personnel management as applied to law enforcement agencies; evaluation, promotion, discipline, training, employee welfare, and problem-solving leadership.

**43.0107-298—Special Topics in Law Enforcement (Demand) 1-8 hrs. cr.**Course content varies and is designed to meet current needs and interests in the rapidly changing field of law enforcement. Precise topics to be announced, and prerequisites will be stipulated in the course syllabus.

#### MACHINE TECHNOLOGY

# School of Technology

Barrow, Nickolaisen

Missouri Southern State College offers an Associate of Science in Machine Technology. The specialized course work in this curriculum is designed to prepare students for employment in the metal working industries. General education courses provide growth as an individual and for constructive living in the family and nation.

The Associate of Science in Machine Technology requires the completion of the general education courses plus the following: DRAF 110, plus DRAF 130, or 202, MACH 100, 110, 160, 210, 240, 260, MATH 112 and 130.

#### 48.0503-100—Introduction to Machine Tool Processes (F) 5 hrs. cr.

An introductory course covering the operation, safety, set-up and theory of the five basic machine tools, the lathe, drill press, milling machine, pedestal grinder, shaper and planers, and the basic theory and operation of heat treatment and inspection equipment. Two one-hour lectures; three three-hour laboratories per week

### 48.0503-110—Advanced Machine Tool Processes (S) 5 hrs. cr.

The study and use of attachments and accessories for basic machine tools and the introduction of production machines and methods; screw machines, turret lathe, tracer lathes, gear hob, electrical discharge machines, I.O. and O.D. grinders, and surface grinders. Two one-hour lectures; three three-hour laboratories per week. Prerequisite: MACH 100.

# 48.0503-160—Inspection and Gaging (S) 2 hrs. cr.

Inspection, gaging & precision measurement procedures utilizing mechanical, electronic and optical measuring equipment and related math. One one-hour lecture; one two-hour laboratory per week. Prerequisite: MACH 100, DRAF 110 or consent of instructor

# 48.0503-210—Fundamentals of Cutting Tools (F) 5 hrs. cr.

Introduction to tool geometry, chip formation and effects of coolants and tool design on tool life. Instruction on the sharpening of standard cutting tools for drilling, formed relieved and profile relieved end mills and mill cutters, and one the applications of various factors on machinability. The use of carbides and ceramics as cutting tools. Two one-hour lectures; three two-hour laboratories per week. Prerequisite: MACH 110 or WOOD 300.

#### 48.0503-240—Fundamentals of Toolmaking (S) 5 hrs. cr.

Advanced course on the designing, machining, and manufacturing of production tools and dies and jigs and fixtures. Prerequisites: MACH 110 and DRAF 110. Two one-hour lectures; six hours laboratory per week.

#### 48.0503-250—Numerical Control Machining (Demand) 3 hrs. cr.

The introduction to point-to-point and continuous path numerical control, part programming, operation of numerical control systems, and justification and maintenance of numerical control systems. One one-hour lecture; two two-hour laboratories per week. Prerequisites: MACH 110, MACH 160, and DRAF 110.

#### 48.0503-260—Fundamentals of Metallurgy (F) 3 hrs. cr.

Introduction to physical metallurgy. Theory and application of principles for identifying, producing, conditioning and testing of ferrous and nonferrous metals. Topics will include heat treating, machining, welding, casting and forming of metals with related testing and metallographic examination. One one-hour lecture; two two-hour laboratories per week.

# 48.0503-298—Selected Topics in Machine Technology (Demand)

1-8 hrs. cr.

Study of special topics in Machine Technology. Each offering of a course will be on a special topic or topics not normally included in another course. Prerequisites will be specified by the department in a syllabus of the course.

# 48.0503-498—Seminar in Machine Technology (Demand) 1-3 hrs. cr.

Covers specialized knowledge and skills related to new developments in machine technology. Topics will vary by the semester and situation. Prerequisite: Senior standing in management-technology and having the Associate Degree in Machine Technology.

# 48.0503-499—Independent Study in Machine Technology (Demand)

1-3 hrs. cr.

Individually directed reading, research, and discussions in selected areas of Machine Technology, for advanced majors. Scope, depth, and area of concentration and credit will be arranged upon entry into the course. Offered by arrangement. Prerequisite: Permission of the instructor.

#### MARKETING AND MANAGEMENT

### **School of Business Administration**

Harbin, Johnson, Larimore, Marion, Miller

Look under General Business for requirements essential to earning Bachelor of Science in Business Administration degree with the Marketing Management major. In the same place find the requirements for the Bachelor of Science in Education degrees with a Business Education major.

#### 06.1401-300—Principles of Marketing (F,S)

3 hrs. cr.

A survey of the major marketing methods, institutions and practices. The subjects of retailing, wholesaling, distribution channels, marketing legislation, advertising, cooperative marketing research and marketing cost are treated from the standpoint of consumers, middlemen and manufacturers. Prerequisite: Econ. 202.

#### 06.1401-312—Retailing (F,S)

3 hrs. cr.

Principles of successful retail management; analytical and research methods applicable to problems of retail management. Prerequisite: MM 300.

#### 06.1401-321—Salesmanship (S)

3 hrs. cr.

Principles and methods of effective personal and industrial selling. Course also stresses practical aspects through actual sale presentation by the students which are videotaped and critiqued according to the basic selling principles. Prerequisite: MM 300, Principles of Marketing.

#### 06.0401-350—Principles of Management (F,S)

3 hrs. cr.

A survey of the current state of the art and science of management. The study of the role of managers and how through the coordination of the managerial functions (planning, organizing, leading, contributing, etc.) organizational and individual goals may be achieved.

#### 06.0401-352—Personnel Management (F,S)

3 hrs. cr.

A study of the principles and practices of management with emphasis on the human factors, including procurement, development and maintenance of an effective work force. Prerequisite: MM 350 or consent of instructor

06.1401-401—Promotional Strategy (F,S)

3 hrs. cr.

Description of fundamental advertising and promotional principles and their application in mass marketing. Analysis of advertising media, the preparation of advertising, and formulation of campaigns. Prerequisite: MM 300.

06.1401-412—Marketing Management (F)

3 hrs. cr.

Managerial aspects of marketing: problems involved in goal setting, planning, and strategies as they apply to product policy, pricing objectives, promotional objectives, distribution policy, and marketing intelligence. Prerequisite: MM 300 and MM 350.

06.0401-431—Production Management (F)

3 hrs. cr.

Principles and decision analysis related to the effective utilization of the factors of production and operations in manufacturing activities for both intermittent and continuous systems. The study of operations management, analytical models and methods, facilities design, and the use of computer modeling for control systems for effective production operations. Prerequisite: GB 321, Business Statistics I.

06.1499-432—Comsumer Behavior (S)

3 hrs. cr.

An interdisciplinary approach to the analysis and interpretation of consumer buying habits and motives, and the resultant purchase of goods and services. The purchaser's psychological, economic and socio-cultural actions and reactions are stressed. Prerequisite: MM 300.

06.1501-441—Organizational Behavior (S)

3 hrs. cr.

Study of people in organizations to provide an opportunity for one to become more aware of themselves. Focuses on organizational effectiveness as well as satisfaction of individual needs. Students are offered the opportunity to develop more fully their ability to analyze and act on human behavior problems they will face in the future. Prerequisite: MM 350.

06.0401-452-Business Policy (S)

3 hrs. cr.

An integrating capstone course cutting across all fields of business administration. Cases pertaining to top management decision making are used. Prerequisite: MM 300, MM 350, Econ. 350. This course must be taken during the last semester of college work.

06.0401-470-Marketing Research (S)

3 hrs. cr

A course involving the systematic gathering, recording, analyzing and presentation of data relating to (1) market analysis, (2) sales analysis, (3) consumer research, (4) advertising research and (5) attitude research. Prerequisite: GB 321, and six hours of marketing.

06.1401-498—Seminar in Marketing and Management (Demand)

1-3 hrs. cr.

A seminar for upper division marketing and management or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

06.1401-499—Independent Study in Marketing and Management (Demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of marketing and management for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: G.P.A. of 3.0 in major field and permission.

#### **MATHEMATICS**

#### School of Arts and Sciences

Martin, Department Head; Boehning; Elick; Jolly; Livingston; Mulkey; Shields; Subramanian

Graduates have graduate school and career opportunities in a variety of areas such as statistics, computer science, economics, engineering, operations re-

search and management as well as in mathematics education.

Requirements for a major in mathematics for the Bachelor of Science degree are 39 semester hours in mathematics including Math 150, 250, 260, 300 and 21 additional upper division semester hours excluding Math 310. Additional requirements are 15 semester hours in physical science (excluding Chem 100, Geol 100, Phys 100, Phys 180 and Phys 300) and 3 hours in computer science, Comp Sci 120 or above.

Requirements for a major in mathematics for the Bachelor of Science in Education degree with mathematics as one of two teaching fields (Plan A) are 30 semester hours in mathematics including Math 150, 250, 260, 300 and 12 additional upper division semester hours excluding Math 310. Additional requirements are 3 hours in computer science, Comp Sci 120 or above. See page

106 for teacher education requirements.

Requirements for a major in mathematics for the Bachelor of Science in Education degree with mathematics as the only teaching field (Plan B) are 33 semester hours in mathematics including Math 150, 250, 260, 300 and 15 additional upper division semester hours excluding Math 310. Additional requirements are 10 semester hours in the physical sciences (excluding Chem 100, Geol 100, and Phys 100) and 3 hours in computer science, Comp Sci 120 or above. See page 106 for teacher education requirements.

General Education requirements for the Baccalaureate and the Associate of Arts degree can be met with any mathematics course numbered 110 or above. Note the limitations on Math 111. General Education requirements for the Associate of Science degree can be met with any mathematics course numbered

030 or above.

27.0101-020—Beginning Algebra (F,S)

3 hrs. cr.

Operations on signed numbers, linear equations and inequalities, systems of linear equations, factoring polynomials. No credit towards baccalaureate degree.

27.0101-030—Intermediate Algebra (F,S)

3 hrs. cr.

Factoring, operations on polynomials, radicals, quadratic equations. Prerequisite: One year of high school agebra and satisfactory score on the Mathematics Placement test, or Math 020 with a grade of C. No credit towards baccalaureate degree.

27.0101-110—Introduction to College Mathematics (F,S) 3 hrs. cr.

Basic college mathematics with an introduction to various areas of mathematics such as computer programming, linear programming, set theory, probability and statistics, and geometry. This course satisfies the requirement in mathematics for general education. Prerequisite: One year of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 020 with a grade of C.

27.0101-111—Mathematics for Elementary Teachers I (F,S) 3 hrs. cr.

The real number system and its subsystems, relations and functions, numeration systems. Prerequisite: One year of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 020 with a grade of C. (Will not meet general education mathematics requirement for nonelementary education majors.)

27.0101-112—Trigonometry (Demand)

3 hrs. cr.

Trigonometric and logarithmic functions, complex numbers, with applications. Prerequisite: One and one half units of high school algebra, one unit high school geometry, and satisfactory score on the Mathematics Placement Test, or Math 030, or permission of the instructor.

27.0101-120—Mathematics for Elementary Teachers II (F,S) 3 hrs. cr.

A continuation of Math III. Sets of points, metric and non-metric geometry, probability. Recommended for prospective elementary teachers. Prerequisite: Math 111 or permission of instructor.

27.0101-130—College Algebra (F,S)

3 hrs. cr.

Linear equations, radicals, exponents, quadratic equations, inequalities, theory of equations, and the binomial theorem. Prerequisite: One and one half units of high school algebra, one unit of high school geometry and satisfactory score on the Mathematics Placement Test, or Math 30 with grade of C.

27.0101-131—Finite Mathematics (F,S)

3 hrs. cr.

An introduction to finite mathematics with algebra that is designed for business, social science, and computer science students. Set theory, functions, matrices, linear programming, probability and statistics, with applications. Prerequisite: One and one half units of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 030 with a grade of C.

27.0101-140—Algebra and Trigonometry (F,S)

5 hrs. cr.

This course is the equivalent of Math 112 and Math 130. Prerequisite: One and one half units of high school algebra, one unit of high school geometry or permission of the instructor and satisfactory score on the Mathematics Placement Test.

27.0101-150—Calculus with Analytic Geometry I (F,S)

5 hrs. cr.

Differentiation and integration of algebraic functions and plane analytic geometry using vectors. Prerequisite: Math 140 with a grade of C, or four units of high school mathematics and a satisfactory score on the Mathematics Placement Test.

27.0101-250—Calculus with Analytic Geometry II (F,S)

5 hrs. cr.

Differentiation and integration of transcendental function and trigonometric functions polar coordinates, theory of limits and continuity, parametric equations. Applications to physical problems. Prerequisite: Math 150 with a grade of C.

27.0101-260—Calculus with Analytic Geometry III (F,S)

5 hrs. c

Solid analytic geometry, indeterminant forms, infinite series, partial differentiation and multiple integrals. Prerequisite: Math 250 with a grade of C.

27.0101-300—Fundamentals of Mathematical Thought (S) 3 hrs. cr.

An introduction to modern algebra and analysis. Sets, relations, functions, logical development of number systems, introduction to theory of groups, rings, integral domains and fields. Prerequisite or corequisite: Math 260.

27.0101-302—Calculus for the Management and Social Sciences (Demand)

3 hrs. cr.

Calculus applications of differentiation and integration in business and social sciences. Prerequisite: Math 130, or Math 131, or two years high school algebra and satisfactory score on the Mathematics Placement Test. Will not count toward a major in mathematics.

27.0501-310—Elementary Statistics (Demand)

3 hrs cr

Provides a basic statistical background for the various majors for advanced study in their specialties. Topics to be covered include data reduction, measures of central tendency, linear regression, correlation, and hypothesis testing, with applications to social,

managerial, biological, and physical sciences. This course satisfies the general education requirments in mathematics. Prerequisite: two years high school algebra or Math 130. Will not count toward a major in mathematics.

13.1311-312—Problems of Teaching Arithmetic in the Elementary Schools

2 hrs. cr.

(See Education 312 for description.) Will not count toward a major in mathematics.

27.0101-322—Differential Equations (S)

3 hrs. cr.

Ordinary differential equations of first and second order, linear equations with constant coefficients, Laplace transforms, power series solutions, numerical solutions, with applications. Prerequisite: Math 260.

27.0101-332—Geometry (F, Even)

3 hrs. cr.

Geometric theory from a modern axiomatic viewpoint. Includes an introduction to finite, projective, Euclidean, and non-Euclidean geometries.

13.1311-339—Teaching Mathematics in Secondary School (S) 2 hrs. cr. (See Education 339 for description.) Will not count toward a major in mathematics.

27.0301-340—Advanced Engineering Mathematics (Demand) 3 hrs. cr.
Applied linear algebra and boundary value problems in partial differential equations.
Corequisite: Math 322 or permission of instructor.

27.0101-342—Abstract Algebra (F,Odd)

3 hrs. cr.

Number theory, equivalence and congruence, theory of groups, rings, ideals, integral domains, and fields. Prerequisite: Math 300.

27.0301-350—Introduction to Numerical Analysis (S, Even) 3 hrs. cr.

Error Analysis, solution of polynomial and transcendental equations, co-location polynomials, matrix methods, numerical differentiation and integration. Prerequisite: Math 250 and Comp. 120.

27.0101-351—Linear Algebra (S,Odd)

3 hrs. cr.

The algebra of linear equations and matrices, vector spaces, linear mappings and transformations, determinants, bilinear and quadratic forms linear functionals, vector inner products and cross products. Prerequisite or corequisite: Math 300.

27.0501-361—Introduction to Probability (F)

3 hrs. cr.

Introduction to theory of probability using concepts and methods of calculus. A study of discrete and continuous distributions. Prerequisite: Math 260.

27.0101-371—Introduction to Operations Research (S,Odd) 3 hrs. cr.

A basic introduction to operations research/management science. This course is designed for computer science and mathematics students. Topics to be covered include linear programming, project scheduling, Markov chains, queing theory. Prerequisite: Math 260.

27.0101-421—Intro to Advanced Calculus (F.Even)

3 hrs. cr.

A rigorous introduction to methods of real analysis. Basic topology of real numbers, sequences and series, the derivative and the Riemann integral. Prerequisite: Math 300.

27.0301-431—Numerical Analysis (F, Even)

hrs o

Fundamental numerical analysis theorems. Error Analysis, data approximation techniques, difference calculus, numerical solution of differential equations. Prerequisite: Math 322 and Comp. 120.

27.0301-452-Mathematical Models (S, Even)

3 hrs. cr.

An introduction to applying mathematics in formulating and analyzing models for real world problems. Topics include linear optimization, game theory, graph models, deterministic and stochastic models and computer simulation. Prerequisite: Math 322.

27.0501-462—Intro to Mathematical Models (S,Odd)

3 hrs. cr.

An introduction to distributions of discrete and continuous random variables, sampling distributions and estimation of paremeters. Investigation of the techniques of hypothesis testing, correlation and regression. Prerequisite: Math 361.

27.9999-498—Seminar in Mathematics (Demand)

1-3 hrs. cr.

A seminar for upper division math or related majors. The class meets regularly each week. Meeting times per week are equal to the number of credit hours determined by the department for a given semester. The course is designed to give both broad and specialized knowledge of the discipline. Prerequisite: Advanced standing in major field and consent of department head.

27.9999-499—Independent Study (Demand)

1-3 hrs. cr.

An independent study course structured by the adviser with approval of the department head and school dean. Prerequisite: advanced standing in the major field with a grade point average of 3.0. Registration must be approved by the advisor, department head, and school dean.

# MILITARY SCIENCE

# School of Technology

Peterson, Harnett, Rousselot, Webster, Cantrell

Military Science provides an additional dimension to a student's educational program. Students that participate in Military Science courses receive leadership, managerial and confidence-building training that will be of great value to them in any career they seek.

The Military Science Program at MSSC is divided into two elective programs:

the Basic Course and the Advanced Course.

Basic Course: The Basic Course encompasses two freshman and two sophomore Military Science courses. There are no prerequisites for participating in any of the four courses offered, they may be taken in any sequence and participants incur no military obligation. These courses are similar to all other college courses in that they carry academic credit and do not have uniform or appearance requirements. The primary objective of Basic Course subjects is to provide all students with a full understanding of the United States Army and to qualify them for the Advanced Course in the event they elect to continue in the Military Science program. Subjects taught in the Basic Course include Leadership, History of ROTC, Survival, Marksmanship, Rappelling, and Land Navigation.

Advanced Course: The Advanced Course includes the Junior and Senior courses. The primary objective is to prepare qualified students for military service in the United States Army or the United States Army Reserve. All Advanced Course students receive \$100 per month for 10 months of the Junior and Senior year and attend Advanced Camp, normally during the summer between the Junior and Senior year. Compensation is received for travel and for time spent at camp. Advanced Course students, upon graduation, are commissioned Second Lieutenants and serve either 3 years in the Active Army or they may serve 3-6 months in the Active Army and fulfill the remainder of their

commitment in a Reserve unit.

All students enrolled in the advanced course, prior to being commissioned as officers in the Army, are required to take at least one course in behavior, written communication skills, military history, national security policy and management.\* The baccalaureate degree and a course in military history, written communication skills and human behavior, must be completed prior to commissioning.\*\* Course work in the other two fields may be deferred, with the permission of the department head, if their completion would require the student to carry an academic overload. The military history requirement is satisfied with HIST 400.

Scholarships: Three and two year scholarships are awarded annually on a best qualified basis. Any fulltime college student may apply. All scholarships pay for tuition, books, fees and other educational expenses. They also pay the

student \$100 a month during each academic year.

Basic Camp: Students with at least two academic years remaining in their course of study (undergraduate, graduate or combination) that have not completed more than two semesters of Military Science can complete the Basic Course requirements by participating in Basic Camp or by attending Summer School. Pay and allowances are received for Basic Camp participants. (See MS 298)

All Non-US citizens in order to complete regulatory requirements, must have

department permission prior to enrolling in Military Science.

Selected students and students with prior Military Science training, including junior ROTC, may be eligible for advanced placement in the Military Science program. A minor in Military Science may be obtained by completion of not less than 16 hours of MS courses to include: MS 301, 302, 411, 412.

Uniform and Text: Textbooks are supplied for all ROTC classes. Uniforms are not required for Freshman and Sophomore-level students. Advanced Course

students are furnished all required uniform items.

\*To determine suitable courses, contact the Military Science Department.
\*\*The written communication skills and human behavior requirements are

satisfied by meeting college General Education requirements.

28.0301-111-Military Adventure Training (F)

2 hrs. cr.

Introduction to basic skills in rappelling, map reading, rifle marksmanship, and a brief history and beginnings of a military career. One-hour lecture; two-hour lab per week.

28.0301-112-Military Team Skills (S)

2 hrs. cr.

Introduction to basic skills in mountaineering, survival training and associated first aid, pistol marksmanship, and military branches and job opportunities. One-hour lecture; two-hour lab per week.

28.0301-121—Individual Military Skills I (F)

2 hrs. cr.

Introduction to land navigation, magnetic compasses, hot and cold weather survival, first aid, rifle marksmanship, and branches of the Army. One-hour lecture; two-hour lab per week.

28.0301-122-Individual Military Skills II (S)

2 hrs. cr.

Introduction to camping safety and sanitation, techniques of survival in various situations and climates, pistol marksmanship and ROTC programs. One-hour lecture; two-hour lab per week.

28.0301-190—Basic ROTC Summer Practicum (Sum) 2 or 4 hrs. cr.

A practical course designed to meet the needs of freshmen and sophomores desiring to enroll for advanced ROTC. A varied number of credits are available depending on the needs of the students. The course will cover mountaineering, map reading, survival, basic physical conditioning, basic drill, organization of the Army, and military weapons systems.

28.0301-298—Seminar in Military Science (ROTC Basic Camp) (Sum)

2-8 hrs. cr.

An in-depth study of the Military Science courses normally taught on college campus during the Freshman and Sophomore years, including: tactics, marksmanship, communication, physical conditioning, and practical leadership experience. The six-week course is taught at Fort Knox, KY, with transportation and room and board provided by the Army.

28.0301-301—Leadership and Management I (F)

3 hrs. cr.

Leadership, its principles, responsibilities and techniques. Functions of the leader, leadership including management of military assets; introduction to leadership theory and practice and military laws. Included is a physical training program and a weekend field problem. Prerequisite: Permission.

28.0301-302—Fundamentals and Dynamics of Military Team I

3 hrs. cr.

Branches of the Army, small unit tactics, communications, leadership theory and practice. Included is a physical training program and two weekend field problems. Prerequisite: Permission.

28.0301-400—United States Military Experience 1775 to Present (S)

3 hrs. cr.

Military history will be viewed broadly, as concerned with the role of force on land or sea or air against foreign governments and domestic dissidents. The course will emphasize military policy, organization, and technology, relating them to political, social, and economic developments. It will cover the major American wars and other activities of the armed forces, but only in their larger aspects, selectively and for the purpose of illustrating the broad themes in the military experience.

28.0301-411—Fundamentals and Dynamics of Military Team II (F)

3 hrs. cr.

Command and staff concept and evolution, organization for operations, the composition and mission of various military teams, broad aspects of military logistics; leadership theory and practice. Also included is a program of directed readings in Military History a physical training program and a weekend field problem. Prerequisite: Permission.

28.0301-412—Leadership and Management II (S)

3 hrs. cr.

Military law, obligations and responsibilities of an officer, military personnel, logistics and administrative management; world change and military implications; leadership theory and practice. Also included is a physical training program and two weekend field problems. Prerequisite: Permission.

28.0301-498—Seminar in Military Science (Demand)

1-3 hrs. cr.

A seminar for upper division cadets. The course is designed to give both broad and specialized knowledge of the discipline through the study and analysis of selected topics. Prerequisite: Advanced standing in Military Science and consent of department head.

#### MUSIC

# School of Arts and Sciences Department of Fine Arts

Sims, Department Head; Carnine; Elliott; Harrell; Harris; Havely; Thelen

The department of Music offers a major in music for the Bachelor of Arts degree which prepares one for performance, studio teaching, and/or continued study toward an advanced degree; and a major in music for the Bachelor of Science in Education which prepares one for teaching in public education.

Requirements for a major in music for the Bachelor of Arts degree are 74 semester hours in music including: Mus. 109, 210, 111, 112, 181, 182, 211, 212, 240 (eight semesters)\*, 311, 312, 420, 431, 444, 450†; eight semesters of private study in one area\*\*; 8 semester hours of music electives (applied or courses); and eight semesters of large ensemble.

See pages 55 and 56 for general education requirements of 46 semester

hours.

Requirements for a major in music for the Bachelor of Science in Education degree with music as the only teaching field (Plan B) are 69 semester hours in music including: Mus. 109. 210, 111, 112, 131, 181, 182, 211, 212, 240 (seven semesters)\*, 311, 312, 332, 420, 431, 432, 444, 450†, seven semesters of private study as a major in one area\*\*, and seven semesters of large ensemble (concert band, marching band, concert chorale, orchestra). The appropriate proficiency test (in piano, or wind instrument, or voice) determined by the instrumental or vocal emphasis, must be passed by examination. The following three courses, Mus. 131, Mus. 332, and Mus. 432, as well as the proficiencies must be completed before recommendation by the department for the "Professional Semester" of supervised teaching.

Three different K through 12 certification options with slightly different re-

quirements are available as follows:

Option 1: Instrumental emphasis: 7 semester hours

Mus. 231, 232, 233\*, 234, 411

\*Percussion majors must substitute a second semester of either Mus. 232 or 234.

- Instrumental major, other than piano: two (2) semester hours of piano study, or the equivalent (class piano may be included)
- b. Piano major: two (2) semester hours of private study on a wind instrument, or the equivalent.

The requirement under a. and b. may be satisfied through study and/or by a proficiency test. The seven semesters of large ensemble must be in band and/or orchestra.

Option 2: Vocal emphasis: 6 semester hours

- Piano major: six (6) semester hours of voice study, or the equivalent (class voice may be included).
- b. Voice major: six (6) semester hours of piano study, or the equivalent (class piano may be included).

The seven semesters of large ensemble must be in concert chorale.

Option 3: Double Certification:

All of the requirements listed for Option 1 and Option 2, either a. or b., except the applied major requirement. A senior recital will only be required in one area. The amount of study required in the second applied area is to be determined through music faculty advisement and approval.

See page 106 for teacher education requirements of 30 semester hours.

\*Attendance at designated afternoon and evening recitals and concerts is required of all music majors each semester.

tA solo recital is required of all music majors.

\*\*In applied music a minimum practice requirement is one hour per day for each hour (half-hour lesson) of credit.

See pages 55 and 56 for general education requirements.

One course of the General Education requirements in area 2 of Humanities and Fine Arts can be met with Mus. 110 or 311 or 312.

## 50.0903-102,202,302,402—Opera or Musical Theater Performance (S)

1 hr. cr.

A laboratory course devoted to the performance of musicals or operas. Performance of a role in the production along with active participation in the different areas of staging the musical or opera. Credit is applied after departmental evaluation and approval at the end of the semester. (Students may not receive credit from both the theater department and music department for the same production).

#### 50.0903-109—Sight-singing and Ear-training (S)

2 hrs. cr.

The basic skills and concepts needed for sight-reading, sight-singing, solfege, rhythmic dictation, melodic dictation, and harmonic dictation are introduced, studied, and applied in aural and notated musical examples.

### 50.0902-110—Music Appreciation (F,S)

3 hrs. cr.

Designed to give the non-music major an insight into musical masterpieces from all eras of music literature.

#### 50.0904-111—Music Theory (F)

3 hrs. cr.

Study of basic fundamentals of music with initiation of harmonic analysis and partwriting. Basic course for music majors; others by consent of the instructor.

#### 50.0904-112—Music Theory (S)

3 hrs. cr.

Sequential course in written harmony, including inversions, seventh chords, and non-harmonic tones. Prerequisite: Mus. 111.

### 50.0903-121,122,321,322—Concert Chorale (F,S)

2 hrs. cr.

Open to all college students. Preparation and performance of great choral works. Prerequisite: permission of the instructor. Each class may be repeated one time for credit.

# 13.1312-131—Introduction to Professional Music Education (Demand)

1 hr. cr.

A course designed to orient the student to the profession of music education.

# 50.0903-133-Opera and Musical Theater (F)

2 hrs. cr.

A course devoted to the history, production, and performance of one act operas, operatic excerpts, musicals and light opera. The course will have academic concentration the first six weeks on opera history and opera production with the last ten weeks focusing upon the particular musical or light opera selected for production the spring semester of that year.

#### 50.0903-135—Musical Theater and Opera (F)

2 hrs. cr.

A course devoted to the history, production, and performance of one act operas, operatic excerpts, musicals and light opera. The course will have academic concentration the first six weeks on musicals and their production with the last ten weeks focusing on the particular one act opera(s) and/or operatic excerpts selected for production the spring semester of that year.

#### 50.0903-141,142,341,342—Lab Band (F,S)

1 hr. cr.

A stage band open to all students who are qualified instrumentalists. The Lab Band will prepare and present several concerts during the year, while dealing primarily with music of the jazz idiom. Prerequisite: permission of the instructor. Each class may be repeated one time for credit.

#### 50.0903-151,152,351,352—Orchestra (F,S)

2 hrs. cr.

Open to all college students who play an orchestral instrument. The orchestra will present public concerts, performing standard and orchestral literature. Prerequisite: consent of instructor. Each class may be repeated one time for credit.

50.0903-161,162,361,362—Collegiates (F.S)

1 hr. cr.

Small select ensemble. Performs all literature from madrigal to modern music, written for small vocal ensemble. Prerequisite: audition. Each class may be repeated one time for credit.

50.0903-171-172,371-372—Brass Choir (F,S)

1 hr. cr.

Open to all students with band instrument experience. Performance of literature for brass ensemble. Two meetings per week. Each class may be repeated one time for credit.

50.0903-180—Choral Society (Demand)

Open to all college students and area adults. The purpose of this course is to offer choral experiences for all college students and adults not eligible for the choir. Concerts will be scheduled throughout the year at the discretion of the conductor.

50.0903-181—Choral Conducting Techniques (F)

2 hrs. cr.

Technique of baton, factors in interpretation, score reading, rehearsal procedures for choral organizations, program building, and public appearances.

50.0903-182—Instrumental Conducting Techniques (S)

2 hrs. cr.

Techniques of baton, factors in interpretation, score reading, rehearsal procedures for instrumental organization, adds program building, and public appearances. Prerequisite: Mus. 181.

50.0903-191,391-Marching Band (F)

2 hrs. cr.

Open to all qualified students with high school band experience. A study and practice of the fundamentals of drill and presentation of marching maneuvers and pageants at athletic events and various community events. Prerequisite: permission of instructor. Each class may be repeated one time for credit.

50.0903-192,392—Concert Band (S)

2 hrs. cr.

Open to all qualified students with band instrument experience. Rehearsal and public performances based upon study and preparation of composite repertoire for this media. Prerequisite: permission of instructor. Each class may be repeated one time for credit.

50.0903-210—Sight-singing and Ear-training (F)

2 hrs. cr. Sequential course in using the skills and concepts in sight-singing and ear-training. Melodies of increasing difficulty will be read at sight. The ear-training emphasis will be in harmonic dictation. Prerequisite: Mus. 109.

50.0904-211-Music Theory (F)

3 hrs. cr.

Modulation, diatonic, seventh chords, altered chords, advanced part-writing procedures. Prerequisite: Mus. 112.

50.0904-212-Music Theory (S)

Secondary dominant chords, augmented triads and sixth chords, advanced modulation, introduction to contemporary techniques. Prerequisite: Mus. 211.

Instrumental Techniques (F,S)

1 hr. cr.

50.0903-231—String techniques (F)

50.0903-232—Brass Techniques (S)

50.0903-233—Percussion Techniques (F) (Not open to percussion majors)

50.0903-234—Woodwind Techniques (S)

Class instruction in the orchestral and band instruments, including a study of methods and materials to be used in the teaching of a beginning student.

50.0903-240—Recital Attendance (F.S)

0 hrs. cr.

Attendance at designated afternoon and evening recitals and concerts is required of all music majors each semester.

50.0999-298—Selected Topics in Music (Demand)

1-3 hrs. cr.

Study of special topics in music not included in another course. Prerequisite: permission of instructor.

50.0903-310-Vocal Techniques (F,S)

1 hr. cr.

Class instruction in tone production of the human voice and the correct usage of vowels and consonants for singing. Skill is developed so that each student will be able to sing individually demonstrating correct tone production. Includes vocal methods and solo materials.

50.0902-311—History of Music (F)

3 hrs. cr.

General survey of history of music from Greek period to 18th century. (Formerly 351.)

50.0902-312—History of Music (S)

3 hrs. cr.

From 18th century to the present. Score reading required. (Formerly 352.)

13.1312-332—Music for Elementary School (F,S)

3 hrs. cr.

Emphasis on methods of teaching music in the elementary classroom and a study of materials to be used. (Formerly 262.)

50.0903-411—Marching Band Methods (F)

1 hr. cr.

Study of procedures needed in organization, promotion, equipping, rehearsing and performance of a marching band. Includes study of musical repertoire and charting of field maneuvers. For music majors; others by consent of instructor. Prerequisite: 2 semesters marching band, prior to being enrolled in marching band while taking the course.

50.0904-420—Form and Analysis (F)

3 hrs. cr.

Harmonic and formal analysis of compositions from the Baroque Era through contemporary music. Prerequisite: Mus. 212, or permission of the instructor.

50.0904-431—Orchestration (S)

3 hrs. cr.

Capacities of orchestral instruments. Scoring for various orchestral combinations, including full orchestra. Prerequisite: Mus. 212, or permission of instructor.

13.1312-432—Music in the Public School (F)

3 hrs. cr.

A course designed to acquaint the music education major with the problems of the administration and supervision of the school music program through the high school level. The content includes the place of music in the school program, music equipment, schedules, budget, instructional problems, and public relations in music. (Formerly 371.)

50.0903-444—Advanced Conducting Techniques (F)

2 hrs. cr.

To prepare the student to successfully handle some of the more difficult conducting skills, includes irregular beat patterns, advance technical problems and methods developed for solving them. Prerequisite: Mus. 181, 182.

50.0903-450—Senior Recital

0 hrs. cr.

A solo recital is required of all music majors.

50.0999-498—Seminar in Music (Demand)

1-3 hrs. cr.

A seminar for upper division music majors or related majors. The topics and methods covered in the seminar will be those not included in other courses. Permission of the instructor is required.

50.0499-499—Independent Study (Demand)

1-3 hrs. cr.

An independent study course structured by the advisor with approval of the department head and school dean. Prerequisite: advanced standing in the major field with a grade point average of 3.0. Registration must be approved by the advisor, department head, and school dean.

# Applied Music — (Private Lessons)

Major in: Brass, Keyboard\*, Percussion, String, Woodwind, and Voice.
All major applied music offerings may be repeated one time for credit.

50.0903-207	2 hrs. cr.
50.0903-208	2 hrs. cr.
50.0903-407	2 hrs. cr.
50.0903-408	2 hrs. cr.
Elective** in the six areas listed above under major.	
50.0903-105	1 hr. cr.
50.0903-106	1 hr. cr.
50.0903-305	1 hr. cr.
50.0903-306	1 hr. cr.
50.0903-107	2 hrs. cr.
50.0903-108	2 hrs. cr.
50.0903-307	2 hrs. cr.
50,0903-308	2 hrs. cr.

# **Piano Proficiency**

50.0903-103 No Prerequisite

50.0903-104 Prerequisite: 50.0903-103 or equivalent 50.0903-203 Prerequisite: 50.0903-104 or equivalent 50.0903-204 Prerequisite: 50.0903-203 or equivalent

Provides an acquaintance with the keyboard through the development of reading skills, fundamental piano techniques, basic musicianship, and elementary repertoire. Maximum credit allowed: four units. Open to all students, but designed primarily for the music major requiring keyboard competency who has little or no piano background.

#### \*Piano Major

50.0903-207; 50.0903-208 Prerequisite: Ability to play in a pianistic and musical manner composition comparable to Piano Level IV.

50.0903-407; 50.0903-408 Prerequisite: Piano 50.0903-208 or equivalent and approved candidacy for BS or BA degree and recital approval.

The required courses for music students enrolled in the BS or BA programs with piano major. Under-class courses may be repeated each year for credit. Descriptions of the piano levels are available from the Music Department office

#### \*\*Piano Elective

50.0903-105; 50.0903-106 No Prerequisite

50.0903-305; 50.0903-306 Prerequisite: 50.0903-106 or equivalent

An elective course open to all students. Provides an opportunity to facilitate individual expression at the keyboard and to develop musicianship.

#### NURSING

# **School of Technology**

AcKiss, Allman, Ipock, Elgin, Jacobs, Ketchum, Ross

Missouri Southern State College offers a program leading to an Associate of Science Degree in Nursing. Upon satisfactory completion, the graduate is eligible to apply to write the State Board Test Pool Examination for licensure as

a Registered Nurse (R.N.). This program is NLN accredited.

Admission to Missouri Southern State College does not automatically confer admission to the nursing program. In addition to meeting admission requirements for the College, candidates who are interested in a career in nursing as a Registered Nurse (R.N.) are required to apply for admission to the Department of Nursing. The application form may be obtained from the Department of Nursing office, Kuhn Hall. Applications should be submitted prior to February 1 preceding the Fall Semester which you wish to enter. Each application is reviewed by the Selection Committee for the Department of Nursing.

In determining a candidate's eligibility for admission basic qualifications compatible with the profession of nursing are given consideration including test results, demonstrated scholastic capability and references establishing personal abilities. Specific admission criteria are available from the nursing de-

partment in Kuhn Hall.

Based upon the Committee's evaluation, each applicant is placed in one of three categories: 1) Approved for Admission; 2) Approval on condition that certain stated requirements are met; or 3) Denied admission.

Tuition and fees for nursing students include those listed on page 34 for all college students. Additional expenses applicable to nursing students are:

1. School uniforms, supplies and equipment Minimum of \$175.00

 Graduation pin, uniform and licensing application fee Minimum of \$135.00

3. Eight week summer session: transportation, room and meals for off campus clinical laboratory. Costs are variable based upon individual arrange-

ment, laboratory schedules and available housing facilities.

The Associate of Science in Nursing requires a minimum of 72 semester hours. The required courses are: Nursing 100, 110, 130, 220, and 240. Supporting science courses required include: Soc. 110 or Psy. 100, Bio. 221 and 231 and Che. 100. Courses to complete general educataion requirements (see page 57) should be selected with adviser approval. Nursing courses must be earned in the prescribed sequence and supporting science courses should be earned in the prescribed sequence (see suggested order of study). Course grades of C or above in science are required for retention in nursing program.

Supervised clinical laboratory periods are an integral part of each nursing course. During clinical laboratory periods students give direct care to patients under the guidance of the nursing faculty. Clinical laboratory periods are conducted in a variety of community health agencies. Three major agencies include: Freeman Hospital, St. John's Regional Medical Center, Joplin; and St.

6 hrs. cr.

John's Regional Health Center, Springfield, Missouri.

18.1101-100—Fundamentals of Nursing (F)

Nursing 100 provides an orientation to nursing through a study of the concepts of wellness-illness health care delivery system, roles of the nurse and a brief study of nursing history. The nursing process is introduced with application to mobility, hygiene care, body processes, body defenses and safety of the individual. An overview of the principles of pharmacology and nutrition is presented. Emphasis is placed on the uniqueness of each individual through the study of the bio-psycho-social development of the individual and family, cultural diversity, and the communication process.

Licensed practical nurses admitted to the program may apply for exemption from the clinical component. Following demonstration of clinical proficiency, LPN's will complete the theory portion of the course, but will be exempt from the clinical laboratory.

Four (4) hours of lecture, eight (8) hours of classroom and clinical laboratory including pre- and post- conferences.

18.1101-110—Maternal and Child Nursing (S) 9 hrs. cr.

Maternal and child care is the study of the developing family and normal growth and development from conception through adolescence. Theory provides the basis for application of the nursing process to the mother and her significant others with emphasis on planning. Following initial emphasis on health, application of the nursing process to complications of childbirth and common illnesses of childhood is presented. Communication skills are applied in working with the developing family. Related drug, nutritional, and rehabilitation needs are included. Historical highlights, legislation and trends are presented.

Five (5) hours lecture, twelve (12) hours clinical laboratory including pre- and post-conferences. Prerequisite: Nursing 100 with a minimum grade of C.

18.1101-130—Psychiatric-Mental Health Nursing (Summer) 4 hrs. cr.

During this course the student is expected to develop skills in the assessment of behavior and emotional status of individuals. Continued emphasis is given to all forms of communication with increased emphasis on disturbed communication. Identification of developmental crises and the impact of crises upon the individual and his family is emphasized.

Planning and intervention in psychiatric nursing will focus on supporting and working with clients to develop those behaviors most conducive to good mental health. The student will be expected to recognize problems developing from disturbed communication and inappropriate behavior. Students participate in therapeutic nurse-patient relationships and milieu therapy. The legal and ethical implications will be emphasized.

Four (4) hours lecture, twelve (12) hours clinical laboratory. Prerequisite: Nursing 110 with a minimum grade of C.

18.1101-220—Nursing in Physical Illness I (F) 9 hrs. cr.

Nursing 220 focuses on care of the client and his family who needs assistance in order to achieve high level wellness. Developmental tasks of the middle years are presented. Use of the nursing process with emphasis on intervention is utilized in caring for the client who has interference with maintenance of body processes; with altered body defenses; whose safety has been jeopardized; or with altered mobility. Related drugs, nutritional and rehabilitation needs are included. Legal accountability and application of communication concepts are continued.

Five (5) hour lecture, twelve (12) hours clinical laboratory including pre- and post-conferences. Prerequisite: Nursing 130 with a minimum grade of C.

18.1101-240—Nursing in Physical Illness II (S) 9 hrs. cr.

Nursing 240 is a continuation of the care of the client and his family who needs assistance in order to achieve high level wellness, including experience in more acute and critical care areas. Developmental tasks of aging are presented. Use of the nursing process with emphasis on evaluation is utilized in caring for the client who has interference with maintenance of body processes, with altered body defenses, whose safety has been jeopardized, or with altered mobility. Related drugs, nutritional and rehabilitation needs are included. This course provides orientation to the role of the graduate by presentation of legal and professional responsibilities and opportunities. With supervision, the student assumes a more active role as a member of the health team.

Four (4) hours lecture, fifteen (15) hours clinical laboratory including pre- and post-conferences. Prerequisite: Nursing 220 with a minimum grade of C.

18.1101-298—Selected Topics in Nursing (Demand)

1-8 hrs. cr.

Study of special topics in Nursing. Each offering of the course on a special topic or topics not normally included in another course.

Prerequisites to be determined by the Department of Nursing and stipulated in a syllabus of the course.

#### OFFICE ADMINISTRATION

# School of Business Administration

Compton, Grim, Honey, Ratliff

Look under General Business for requirements essential to earning an Associate of Science degree in Secretarial Science, the Certificate of Achievement and the Bachelor of Science in Business Education degree.

07.0601-101—Typewriting I (F,S)

3 hrs. cr.

The emphasis of this course is to learn to manipulate the typewriter efficiently. The development of both speed and accuracy are stressed so that the student will leave the course with a skill that will be of use to him personally. A few simple letter styles are taught as well as manuscript style and basic tabulation. No credit given to students with one or more units of high school typweriting.

07.0601-102—Typewriting II (F,S)

3 hrs. cr.

This is primarily a business communications typing course. It covers all styles of business letters, technical and statistical reports, tables and employment communications. Prerequisite: OA 101 or a good knowledge of the keyboard.

07.0601-111-Elementary Shorthand (F)

3 hrs. cr.

A theory course in which the principles of shorthand are studied. Vocabulary building is stressed. Not open to students who have completed one year of shorthand in high school. Class meets five days a week. (Prerequisite: Typewriting)

07.0601-120-Intermediate Shorthand (F,S)

3 hrs. cr.

A dictation course which includes a review of the theory and special attention to the development of efficient transcription procedures. Dictation ranges from 60 to 110 words per minute. The minimum speed requirement by the end of the semester is 80 words per minute with 95 percent accuracy. Prerequisite: OA 111 or any course in which the theory has been completed.

07.0601-200—Advanced Typewriting (F,S)

3 hrs. cr.

Production of all types of letters, reports, business forms, tables, and legal forms based on realistic office job simulations. Prerequisite: OA 102 or equivalent.

07.0601-220—Dictation and Transcription (S)

3 hrs. cr.

The application of shorthand theory, grammar, punctuation and capitalization rules, and spelling to the transcription of business letters and memorandums. Emphasis is upon accuracy and rate of transcription and the ability to produce mailable office correspondence. Prerequisites: OA 120 or equivalent and OA 102 or equivalent.

07.0601-230—Secretarial Procedures (S)

3 hrs. cr.

A study of secretarial duties performed and the conditions under which the secretary functions. The student will receive practice in decision making and the application of secretarial skills through simulated office situations. The course is offered for sophomores in the Office Administration curriculum. Prerequisite: OA 102; recommended, GB 320/or permission.

# 07.0601-231-Secretarial Machines (F,S)

3 hrs. cr.

The student will be introduced to and expected to develop a knowledge and efficient operable skill in offset, stencil and fluid duplicating machines, other copying machines, transcribing machines and word processing equipment. The course is offered for students in the Office Administration curriculum. Prerequisite: OA 102 Intermediate Typewriting.

07.0601-240—Records Management (S)

3 hrs. cr.

The student will receive intensive exposure to the knowledges and skills that are needed in modern day records management and their application to the various types of businesses. The course will include a study of the creation, classification, retention and disposal of records with emphasis on the control aspect. The course is offered for students in the Office Administration curriculum.

07.0601-250—Introduction to Word Processing (S)

3 hrs. cr.

A course designed to introduce the student to the total concept of word processing as it relates to administrative services and machine technology in the modern business organization. Prerequisite: OA 102 Intermediate Typewriting.

13.1303-312—Principles of Business Education (F)

3 hrs. cr.

A study of the basic principles and fundamentals of business education including curriculum, trends, equipment, materials, professional organizations, and vocational programs.

13.1303-336—Methods of Teaching Business (S)

2 hrs. cr.

Special methods of instruction problems and difficulties peculiar to the teaching of each business subject; presentation of subject matter; content and arrangement of material, organization and administration. Prerequisite: Admission to the Teacher Education Program and completion of required business courses (see General Business). Two hours credit in Education.

#### PARALEGAL STUDIES

# School of Arts and Sciences Department of Social Sciences

J. Conboy, Department Head; Spradling, Director; Yates

The paralegal program is designed for the student seeking a career as a legal assistant working under the direction and supervision of an attorney in private practice, government service or legal assistance. However, the knowledge and skills acquired in the paralegal program are beneficial to students in the areas of law enforcement, pre-law, business law, and political science. Students who choose to learn more about the legal system and how to develop their own skills in legal research for personal enrichment are also encouraged to enroll.

At the present time there is no major offered in paralegal studies. However, a student enrolled in the paralegal program may obtain an Associate of Arts degree with an emphasis in paralegal studies. Paralegal studies may be used as

a supporting area for students in Bachelor of Arts programs.

22.0199-298—Topics in Paralegal Studies (Demand)

3 hrs. cr

Special paralegal studies topics of current interest to the student. Subjects are changed each semester. Students are encouraged to submit areas of interest to the Social Science Department.

22.0103-301—Introduction to Legal Assistance (F)

3 hrs. cr.

An introduction to the American legal system with emphasis upon the roles, skills, and tasks of the paralegal. Topics include professional ethics, client interviewing, and legal analysis.

# 06.0101-301-Business Law I (F,S)

3 hrs. cr.

A study of the principles of law and its enforcement as applied to American business. The course includes the study of contracts, agency and employment, negotiable instruments, personal property, bailments, and sales of goods. Special attention is placed on law terminology and cases and problems are used to illustrate the various aspects of business law. (Offered in Business Administration.)

#### 06.0101-302-Business Law II (F,S)

3 hrs. cr.

Study of secured transactions, insurance, bankruptcy, agency, employment, partnerships, corporations, real property, torts, criminal law and government regulations. Special emphasis is placed on Missouri case-law and statutes. Lectures are supplemented by actual cases and case digests. (Offered in Business Administration.)

### 22.0199-302—Legal Research (F, Even, S, Even)

3 hrs. cr.

An introduction to the type of research involved in case preparation; use of the law library and the various digests, encyclopedias, reporters, etc., contained therein.

## 22.0199-311-Property (S,Odd)

3 hrs. cr.

A study of the laws relating to real and personal property with emphasis on the procedures and forms utilized in real estate transactions and conveyances such as deeds, contracts, and leases.

## 22.0199-312—Civil Litigation (S,Odd)

3 hrs. cr.

A study of the process of civil litigation, rules for filling and bringing a lawsuit before state and federal courts, preparation of legal forms, and the application of laws related thereto.

## 22.0199-401—Wills, Trusts, and Probate (F,Odd)

3 hrs. cr.

A study of the more common forms of wills and trusts, and a survey of the fundamental principles of law applicable to each; a study of the organization and jurisdiction of a Missouri Probate Court; a detailed analysis of the administration of estates in Missouri Probate; review of estate and inheritance taxes applicable to such estates.

# 45.1001-431—Constitutional Law I (F, Even)

3 hrs. cr.

Studies constitutional principles related especially to the area of civil rights and liberties. Attention will be given to a study of the structure and functions of the American court system and its relationship to the overall governmental process. (Offered in Political Science.)

#### 45.1001-432—Constitutional Law II (S,Odd)

3 hrs. cr

Studies constitutional principles related especially to the area of due process and equal protection of the law. Attention will be given to judicial behavior and the role of federal courts in the policy-making process. (Offered in Political Science.)

#### 22.0119-491—Internship (Demand)

3 hrs. cr.

An applied internship of 135 hours done under the direct supervision of a practicing professional who is directly engaged in a day-to-day application of the law (i.e. judges, attorneys, government officials), as approved by the department head and the school dean

#### 22.0119-498—Senior Seminar (S, Even)

3 hrs. cr.

A comprehensive analysis and review of selected legal topics with topics to be announced when course is offered. Prerequisite: 9 hours of paralegal studies or consent of the instructor.

# PHILOSOPHY

# School of Arts and Sciences Department of English

Gale, Department Head; Harder

38.0101-201—Introduction to Philosophy (F)

3 hrs. cr.

Comparative survey of major types of philosophy, and of representative problems in philosophy.

38.0101-212—Ethics (S)

3 hrs. cr.

Exploration of the problem of value, personal moral attitudes and standards, comparative survey of major ethical systems, and evaluation of the chief ethical struggles in contemporary society.

# HEALTH, PHYSICAL EDUCATION AND RECREATION

# School of Education and Psychology

Oldham, Department Head; Beard; Ellis; Evans; Frazier; Giesselmann; Lampe; Landrith; Lipira; Phillips; Turner; Walker; Williams

Students who desire certification as a teacher of physical education may choose to become qualified at either the elementary level, the secondary level, or a combination of both elementary and secondary levels. Students planning to major in this field should refer to page 106 of this catalog where the Teacher Education Program is described. Students planning to teach at both elementary and secondary levels should select the K-12 Plan. Those desiring to make physical education one of two teaching fields should prepare under either the K-8 plan or the 7-12 plan. The second teaching field must be selected from: art, biology, business education, chemistry, English, mathematics, physics, physical science, Spanish, or speech. The student will consult the specific department concerned for the requirements of the second teaching field.

#### PHYSICAL EDUCATION

A major for the Bachelor of Science in Education degree with one teaching field (K-12 plan) consists of 52 semester hours. The required courses are Bio 221, HPER 251, HPER 252, HPER 310, HPER 312, HPER 321, HPER 332, HPER 335, HPER 340, HPER 342, HPER 350, HPER 351, (Men), HPER 352 (Women), HPER 365, HPER 370, HPER 431, HPER 450, HPER 470, Educ 338, Psy 412. (A course in child psychology (Psy 300) or human development (Psy 110) is required for teachers of elementary school physical education.

A major for the Bachelor of Science in Education degree with elementary physical education as one of two teaching fields (K-8 plan) consists of 35 semester hours. The required courses are: Bio 221, HPER 310, HPER 312, HPER 321, HPER 332, HPER 335, HPER 340, HPER 342, HPER 365, HPER

370, HPER 431, Educ 338, and Psy 412.

A major for the Bachelor of Science in Education degree with secondary physical education as one of two teaching fields (7-12 plan) consists of 37 semester hours. The required courses are: Bio 221, HPER 251, HPER 252, HPER 321 (Women), HPER 335, HPER 342, HPER 350, HPER 351 (Men), HPER 352 or 360, (Men), HPER 365, HPER 431, HPER 450, HPER 470, Educ 338 and Psy 412.

#### 13.1314-101—Introduction to Physical Activities (F,S)

2 hrs. cr.

The course is a combination of physical activities and lectures; two individual or dual activities are offered to provide the student with the opportunity to develop a degree of skill sufficient to participate during leisure time and the lectures acquaint students with basic knowledge, understandings and values of physical activity as it relates to optimal healthful living. This course is necessary for the general education requirement in physical education.

# 13.1314-150—Rules and Officiating of Team Sports (F,S)

3 hrs. cr.

Knowledge and skills for officiating basketball, volleyball, softball, baseball, and football; officiating laboratory required in some areas. Open to all students.

#### 13.1307-160—Personal Health (F,S)

2 hrs. cr.

Study of health problems of the individual, body mechanics, nutrition, drugs and drug abuse, sex hygiene, mental hygiene and the cause and prevention of common diseases, Not recommended for elementary education majors.

# 13.1314-251—Fundamentals of Physical Education Activities I (F)

4 hrs. cr.

Study of the skills and understandings of selected activities: games, sports, and individual activities commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness. The course is generally team taught by physical education faculty; meets for two periods daily. (either HPER 251 or 252 may be replaced with 5 semester hours of different activity courses, with permission of department head.) Enrollment restricted to P.E. majors. Prerequisite: 30 hours.

# 13.1314-252—Fundamentals of Physical Activities II (S) 4 hrs. cr.

Study of the skills and understandings of selected activities: sports, gymnastics, tumbling, and rhythms commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness. The course is generally team taught by physical education faculty; meets for two periods daily. Enrollment restricted to P.E. majors. Prerequisite: 30 hours.

# 13.1314-310—The Elementary School Physical Education Program (F)

3 hrs. cr.

A course designed to familiarize the student with the procedures and techniques for planning the curriculum for elementary school physical education. (P.E. majors only.)

# 13.1314-311—Physical Education for the Elementary School (F.S)

2 hrs. cr.

Study of the methods and materials needed in directing the activity programs of games, skills, rhythm, and stunts for the elementary school child. Designed for men, and women who are candidates for the elementary level teaching certificates.

# 13.1314-312—Teaching Elementary School Physical Education (S)

3 hrs. cr.

Analysis of basic movement patterns, basic skills, rhythmic and game activities with detailed explanations of presentation to the elementary school child. Prerequisites: HPER 310 (P.E. majors only.)

# 13.1314-321—Theory and Analysis of Selected Team Sports

3 hrs. cr.

A professional course designed for physical education teachers with emphasis on organizing and performing of selected team sports. Prerequisite: HPER 252.

#### HEALTH, PHYSICAL EDUCATION AND RECREATION

13.1314-332—Rhythmic Form and Analysis (F)

2 hrs. cr.

Analysis of dance forms showing how complex music and dance forms are evolved. Prerequisite: HPER 252.

13.1314-335—History and Philosophy of Physical Education

2 hrs. cr.

A study of the changing role of physical education as indicated by its historical past and as evidenced through the influence of the various philosophies. Prerequisite: HPER 252 or currently enrolled in 252.

13.1314-340—Motor Learning in Physical Education (F) 3 hrs. cr.

Study of motor learning to provide the teacher with the background necessary for identification of physical, mental, social, and emotional development of children and their effect on behavior and movement. Recommended for teachers working with children with special problems. Prerequisite: HPER 310 or 311.

13.1314-342—Kinesiological Approach to Movement (S) 3 hrs. cr.

A mechanical and Kinesiological approach to the movement of individuals in various activities. Prerequisite: Bio 221 or equivalent.

13.1314-350—Theory of Basketball (S)

2 hrs. cr.

Organization and management of the secondary school basketball program. Systems of offense and defense in basketball. Study of rules, training schedule, discussion of problems arising during training and regular playing season. Prerequisite: HPER 252.

13.1314-351—Theory of Football (F)

2 hrs. cr.

Attention to team play, systems of offense and defense, field strategy, discussion of rules, training and equipment. Prerequisite: HPER 252.

13.1314-352—Theory of Track and Field (S)

2 hrs. cr.

Organization and administration of meets, coaching, physical conditioning and training for each event in track and field programs. Prerequisite: HPER 252.

13.1314-360—Theory of Baseball (S)

2 hrs. cr.

Organization and management of a school baseball program to individual techniques' team play and problems in coaching of baseball. Prerequisite: HPER 252.

13.1314-365—Socio-Psychological Aspects of Athletics (F,S) 2 hrs. cr.

Behavior exhibited in the learning of skills and physical performance related to sociological and psychological concepts connected with the demands of physical activities. Group and individual activities and conflicts in sport are analyzed; the effect of sport on society is also studied. Prerequisite: HPER 252.

13.1307-370—School Health Education (F)

3 hrs. cr.

Study of the content, facilities, and equipment needed for teaching school health and safety. Should be taken by all elementary education majors in place of HPER 160. Separate sections with emphasis on Health and Nutrition Programs for children are taught for elementary majors. Prerequisite: 5 hours Biology.

13.1314-431—Physiology of Exercise (F,S)

2 hrs. cr.

The course in this area is based upon the student already having prerequisite knowledge of human physiology. An emphasis is placed on human responses to varying levels of physiological conditioning and the environment within which the exercise is taken. Specifically, the course includes physiological principles to better understand human physiology under exercise stress. Prerequisite: Bio 221.

13.1314-450—Prevention and Care of Injuries (F,S)

3 hrs. cr.

A course designed to provide knowledge to the student related to preventing, care, and rehabilitation of injuries. Laboratory experiences are included. Prerequisite: HPER 342.

13.1314-470—Administration of Physical Education (F,S)

hrs. cr

Organization and management of health and physical education in schools, scheduling, personnel, curriculum, finances, equipment and facilities. The intramural program is also studied. Prerequisite: 20 hours HPER.

13.13140-498—Seminar in Health or Physical Education (Demand)

1-3 hrs. cr.

A thorough study of an advanced problem in health or physical education for selected students. Prerequisite: Senior standing, permission of department head.

13.1314-499—Independent Study

1-3 hrs. cr.

Research of a problem or field study relating to physical education; material, content, credit and schedule to be arranged by the department head. Prerequisite: Senior standing, 3.0 grade point average in major, and permission of department head.

#### **DRIVER EDUCATION**

To meet the Missouri teacher certification requirements as a driver education instructor, the following courses are required: HPER 220, HPER 230, HPER 361, HPER 362, Psy 110 or Psy 301. Elective courses must include 6-8 semester hours from the following: LE 100, Auto 130, Psy 221, Educ 370, and Soc 352. The minimum total semester hours required for certification is 21.

13.1304-220—First Aid (S)

2 hrs. cr.

Designed to complete the standard course of the American Red Cross in First Aid.

13.1304-230-Safety (F)

2 hrs cr

A course aimed at developing concepts which are basic to safety education and for preparing the student to assume responsibility for accident prevention in the school, home, and community.

13.1304-361—Introduction to Driver Education (F)

3 hrs. cr.

The frist of two courses designed to prepare teachers of driver education for secondary schools. The place of the motor vehicle in American life; traffic safety; instructional materials and recommended methods of presenting such materials in the classroom and in the car on the road. Prerequisites: Psy 301 or Psy 110. Student must have: (1) a valid driver's license and (2) a safe driving record.

13.1304-362—Advanced Driver and Traffic Safety (S)

3 hrs. cr.

A continuation of 361 with special attention given to administration, organization, finance, adult education, research, and evaluation of the school driver education program. Traffic safety problems at the local, state and national levels are also considered. Laboratory required. Prerequisite: HPER 361.

#### **HEALTH EDUCATION CERTIFICATION**

To meet the certification requirements as a health education instructor (grades 7-12), the following courses are required: Soc 121, HPER 160, Bio 221, Psy 221, HPER 370, Chem 100 or Bio 211, and DH 310.

#### COACHING CERTIFICATE\*

The coaching certificate has been established to provide an opportunity for students other than physical education majors to become certified coaches in the State of Missouri. To earn the certificate the student should have a background in athletics and complete a total of 15 semester hours plus any prerequisite. The required courses are as follows: HPER 150, HPER 342, HPER 450. Select 6 hours from HPER 350, HPER 351, HPER 352, HPER 360.

\*This certificate does not permit the individual to teach physical education.

# THE ACTIVITY PROGRAM IN PHYSICAL EDUCATION

The activity program in physical education has two basic objectives. It has the purpose of offering a program that will provide the student with the opportunity to develop a degree of skill sufficient to create interest and participation in this activity during leisure time in the adult years. A second important purpose is to provide the student with the necessary knowledge of philosophical, psychological, and sociological nature of physical activity to comprehend the necessity of continued physical health throughout his lifetime.

To insure exposure to the various recreational activities, the College has adopted the following requirements:

All men and women (except physical education majors) must enroll in HPER 101. Students are required to complete two additional hours; this may be done by choosing two activity courses or HPER 160. (Students are not to repeat HPER 101.)

#### **ACTIVITY COURSES**

Course No.	Hours cr.
13.1314-100	Individual Physical (Therapeutic) (F)
13.1314-161	Varsity Football (F)
13.1314-162	Varsity Basketball (F) 1
13.1314-163	Varsity Volleyball (F)
13.1314-171	Varsity Cross Country (F) 1
13.1314-172	Varsity Track and Field (S) 1
13.1314-180	Varsity Golf (S) 1
13.1314-182	Varsity Baseball (S) 1
13.1314-183	Varsity Softball (S) 1
13.1314-191	Varsity Soccer (F)
13.1314-192	Varsity Tennis (S) 1
13.1314-210	Golf and Badminton (F,S) 1
13.1314-222	Varsity Sports and Activities (F,S)
13.1314-231	Elementary Gymnastics and Tumbling (F,Odd) 1
13.1314-232	Intermediate Gymnastics (S, Even) 1
13.1314-242	Volleyball and Tennis (S,Odd)
13.1314-250	Dance and Exercise (S) 1
13.1314-261	Elementary Swimming (F,Odd)
13.1314-270	Advanced Swimming + Life Saving (S) 1
13.1314-292	Track, Weight Training (F,S) 1

### PHYSICS

# School of Arts and Sciences Department of Physical Science

Baiamonte, Department Head; Phillips; Sloan; Strobel

Degrees prepare students for: graduate school in science and engineering,

industry and government positions, high school teaching.

Requirements for a major in physics for the Bachelor of Science degree are 37 semester hours in physics including Phys 201, 202, 203, 301, 322, 341, 372, 381, 401, 452, or 480 and 498. Additional requirements are 18 semester hours in mathematics including Math 150, 250, 260 and 322. The following courses are recommended but not required: Chem. 101, 102, Comp. 120, 240, Math 351, 412, 431 and Phys. 480. Students who plan to seek an advanced degree in engineering should plan a minimum of one year at a major university for a Master's degree and two years for both the Bachelor and Master's degrees in Engineering. For engineering guidelines see Department Head of Physical Science.

Requirements for a major in physics for the Bachelor of Science in Education degree with physics as one of two teaching fields (Plan A) are 23 semester hours in physics including Phys. 201, 202, 203, 301, 322, 381 and 498 (2 hrs.). Additional requirements are 5 semester hours in chemistry including Chem. 101, 4 semester hours in biology including Bio. 110, and 15 semester hours in mathematics including Math 150, 250, 260. The following courses are recommended but not required: Chem. 102, Comp. 120, Phys. 372 and Geol. 110. See page 106 for teacher education requirements.

Requirements for a major in physics for the Bachelor of Science in Education degree with physics as the only teaching field (Plan B) are 26 semester hours in physics including Phys. 201, 202, 203, 301, 322, 381, 498 and 4 additional upper division semester hours in physics. Additional requirements are 5 semester hours in chemistry including Chem. 101, 4 semester hours in biology including Bio. 110, and 15 semester hours in mathematics including Math 150, 250, and 260. The following courses are recommended but not required: Chem. 102, Comp. 120, Phys. 372, and Geol. 110. See page 106 for teacher education requirements.

General Education requirements can be met with Phys. 100 or any 5 semester hour course in physics.

40.0101-100—Fundamentals of Physical Science (F,S) 5 hrs. cr.

Basic concepts in the field of physics, chemistry, geology, and astronomy. Emphasis on such environmental topics as energy reserves, chemical and thermal pollution, fossil and nuclear power generation, and population. Lecture and demonstration periods. Prerequisite: Math 20 with a minimum grade of C or qualified for Math 110 on the MMPT.

40.0801-151—Elementary College Physics I (F) 5 hrs. cr.

Study of mechanics, properties of matter, heat, wave motion, sound and electrical circuits. Four hours of lecture and one 2-hour laboratory per week. Prerequisites: Math 140 or 130 and permission of the instructor.

40.0801-152—Elementary College Physics II (S) 3 hrs. cr.

Magnetism, optics, relativity, radioactivity, nuclear reactions and further study of mechanics including rotational dynamics. Two hours of lecture and one 2-hour laboratory per week. Prerequisite: Phys. 151.

40.0401-180—Introduction to Meteorology 3 hrs. cr.

Principles basic to the understanding of weather and climate. Three lectures per week. Prerequisite: Phys. 100 or equivalent. (Does not count toward a physic's major.)

40.0801-201—General Physics I (F,S)

4 hrs. cr.

Introductory study of the mechanics of particles and rigid bodies with emphasis on vector methods. Three hours of lecture and one three-hour laboratory-recitation class per week. Corequisite: Math 150.

40.0801-202—General Physics II (F,S)

3 hrs. cr.

A study of wave motion, sound, geometrical and physc) physical optics, and thermodynamics. Two hours of lecture and one two-hour laboratory-recitation class per week. Prerequisite: Phys 201. Corequisite: Math 250 or permission of instructor.

40.0801-203—General Physics III (F,S)

4 hrs. cr.

A study of electricity and magnetism. Three hours of lecture and one three-hour laboratory-recitation class per week. Prerequisite: Phys 201 and Math 250 or permission of instructor.

40.0101-298—Selected Topics in Physical Science (F,S)

1-3 hrs. cr.

Study of special topics in physical science not normally offered in other courses. Prerequisite or corequisite: Math 130 or equivalent.

40.0201-300—Astronomy (Demand)

3 hrs. cr.

The solar system, Kepler's laws, celestial coordinates and observing, Hertzsprung-Russell diagrams, stellar evolution, pulsars, black holes, nebulae, galaxies, and cosmology. Three lectures per week. Prerequisite: Physics 100 or equivalent and one year of high school algebra.

40.0801-301-Modern Physics (F)

4 hrs. cr.

Wave motion, special theory of relativity, wave-particle experiments, introductory quantum mechanics, and nuclear physics. Prerequisite: Phys. 203. Corequisite: Math 260.

40.0801-312—Statics (S)

3 hrs. cr.

The principles of mechanics as applied to problems of engineering in which the structures under consideration are in static equilibrium. Three lectures per week. Prerequisite: Phys. 201. Corequisite: Math 260.

40.0801-322—Classical Mechanics (S.Odd)

3 hrs. cr.

Kinematics and dynamics of particles and systems of particles including the harmonic oscillator, potential functions, conservative fields of force, central force motion, energy, gravitation, rigid bodies and an introduction to the mechanics of continuous media. Three hours of lecture per week. Prerequisite: Phys. 201. Corequisite: Math 322 or permission of instructor.

40.0801-341—Thermal Physics (S, Even)

4 hrs. cr.

Temperature, transfer of heat, laws of thermodynamics, entropy, enthalpy, reversibility and irreversibility, thermal properties of materials, low temperature physics, change of phase, kinetic theory, statistical mechanics and use of thermo tables. Four hours of lecture per week. Prerequisites: Math 260 and Phys. 202.

40.0801-372—Electronic Circuits (S)

4 hrs. cr.

Circuit analysis, resonance, transistor characteristics, power supplies, amplifiers, and integrated circuits. Two three-hour lectures and lab per week. Presently limited to 15 students by equipment considerations. Prerequisite: Phys. 260. Corequisite: Math 260.

40.0801-381—Intermediate Physics Laboratory (F,Odd)

3 hrs. cr.

Experiments in classical and modern physics, including wave phenomena, heat transfer, electrical measurements, optics, photo-electric effect and radioactivity. Two 3-hour laboratories per week. Prequisite: Phys. 301 or permission of instructor.

40.0801-401—Electricity and Magnetism (F,Odd)

4 hrs. cr.

Includes study of electrostatic forces, electirc fields, electric potential, properties of conductors and dielectrics, magnetic fields, magnetic properties of matter, induced electromotive force, Maxwell's equations and electromagnetic waves. Four hours of lecture per week. Prerequisites: Math 260 and Phys. 203.

40.0801-452—Quantum Mechanics (Demand)

3 hrs. cr.

Time independent Schroedinger equation, eigenfunctions, expectation values, differential operators, pertubation theory, multi-electron atoms and applications to solid state physics. Three hours of lecture per week. Prerequisite: Phys. 301 and Math 322.

40.0801-480—Selected Topics in Physics and Engineering (Demand)

3 hrs. cr.

Students may select one or more of the following topics for further study: Solid State Physics, Optics, Nuclear Physics, Advanced Mechanics, Circuit Analysis, Fluid Mechanics and Heat Transfer, and Mechanics of Materials.

40.0801-498-Seminar (F,S)

1-3 hrs. cr.

Topics of current interest by the student from the areas of physics and engineering. Secondary education majors will be required to present several lecture-demonstration programs illustrating the basic concepts in physics at the secondary level. Open to students having a minimum of 18 hours of physics and permission of the instructor.

40.0801-499—Independent Study (F,S)

1-3 hrs. cr.

An independent study course structured by the adviser with approval of the department head. Prerequisite: Advanced standing with a grade point average of 3.0 in the major field. Registration in the course must be approved by the adviser, department head, and school dean.

#### POLITICAL SCIENCE

# School of Arts and Sciences Department of Social Sciences

J. Conboy, Department Head; St. Clair; Yates; Youst

Among other career options, the Bachelor of Arts degree with a major in political science is appropriate for those students seeking to do graduate work in political science, enter professional schools of law or public administration, join the public service, work in community service, and, in some instances, teach in secondary schools.

Requirements for a major in Political science for the Bachelor of Arts degree are 30 semester hours in political science including PSc. 120 and at least 12 upper division semester hours of political science electives. The student should select courses in consultation with an advisor from the political science faculty.

Requirements for a major in social sciences - political science emphasis - for the Bachelor of Science in Ed. degree with social sciences as the only teaching field (Plan B) are 48 semester hours. Included are PSc. 120 and 12 upper division semester hours in political science; Hist. 110, 120, 130, 140, 6 upper division semester hours in U.S. History and 3 upper division semester hours in European or Oriental history; Soc. 110 and 3 upper division semester hours of sociology elective; 3 semester hours of economics and 3 semester hours of geography. See page 106 for Teacher Education requirements.

NOTE: Political Science 120 (a General Education requirement) is a prerequisite for all other political science courses.

# 45.1001-120—Government: National, State, Local (F.S) 3 hrs. cr.

The primary purpose of this course is to help the student develop a better understanding of both U.S. and state and local governments. The student will form the background to keep up with, and understand, political developments so he or she can become part of the informed citizenry which is necessary to democracy. A General Education requirement for all Bachelor of Arts and Bachelor of Science degrees.

#### 45.1001-298—Topics in Political Science (Demand) 3 hrs. cr.

Special political science topics of current interest to the student or faculty member who offers the class. Subjects and instructors are changed each semester. Students are encouraged to suggest possible course topics to the political science faculty.

# 45.1001-300—Introduction to Political Science Methods (Demand)

3 hrs. cr.

The nature, possibilities, and limitations of political inquiry emphasizing research methods and tools. A valuable course for students who wish to engage in non-library types of research projects.

#### 45.1001-301—Political Parties and Elections (F, Even)

3 hrs. cr.

An analysis of the origins, structure, and functions of political parities; the dynamics of the two-party system; the role of third parties and the election process.

# 45.1001-302—Public Opinion and Pressure Groups (S,Odd) 3 hrs. cr.

Focuses on origins, impact, and measurement of public opinion. Also examines the scope, nature, and power of interest groups in American society with special attention given to their role in formulating public opinion and public policy.

# 45.1001-310—Law, Society, and Citizenship (Demand)

2 hrs. cr.

A study of the American legal system with special attention given to the organization, methods, processes, and behaviors of the judiciary.

#### 45.1001-311—The American Presidency (F,Odd)

3 hrs. cr.

The politics of presidential selection, the powers of the President, the organization of the executive branch and its relations with other organs of government.

#### 45.1001-312—The Legislative Process (S.Even)

3 hrs. cr.

An introduction to the legislative process; problems of representation, organization of the legislature, participation, and proposals for improved organization. Emphasis is placed on the United States Congress.

#### 45.1001-320—State Government (F,Odd)

3 hrs. cr.

A study of the general structure, theories, operation and problems of state government with special emphasis on the government of Missouri.

#### 45.0901-321—International Relations (F, Even)

3 hrs. cr.

A study of the present-day relations and problems among the states of the world and the major factors which underline and influence these relations.

#### 45.0901-322—International Law (S,Odd)

3 hrs. cr.

Examines the rules and principles accepted by the members of the community of nations as defining their rights and duties and the procedures employed in protecting their rights and performing their duties.

#### 45.1001-331—Comparative Government: Europe (F,Odd) 3 hrs. cr.

An analysis of the governments of selected European countries emphasizing the development of their political systems both in theory and practice. Comparisons with American governmental institutions are made throughout the course.

# 45.1001-332—Comparative Government: Latin America (S, Even) 3 hrs. cr.

Examines the governments and cultures of selected Latin American countries emphasizing the development of their political systems in both theory and practice.

# 45.1001-342—Municipal Government (S, Even)

3 hrs. cr.

Studies the structure, legal status, functions and organization of city, town, and village government in the United States.

#### 45.1001-411—Political Theory (F,Odd)

3 hrs. cr.

Selected Western political philosophies from early recorded history through the present time are surveyed.

# 45.1001-412—Contemporary Political Thought (S, Even)

3 hrs. cr.

Focuses on examining twentieth century political ideas.

#### 45.0801-420—United States Constitutional History

3 hrs cr.

(See History 420). This course may not be used for Political Science credit if the student also takes PSc. 431 or 432.

#### 45.1001-421—Public Administration (Demand)

3 hrs. cr.

Examines the administrative aspects of government; surveys the major sub-fields of public administration, i.e., politics and administration, organizational behavior, management, decision-making, personnel, public budgeting and finance, policy analysis and program evaluation, and administrative law.

### 45.1001-431—Constitutional Law I (F, Even)

3 hrs. cr

Studies constitutional principles related especially to the area of civil rights and liberties. Attention will be given to a study of the structure and functions of the American court system and its relationship to the overall governmental process.

# 45.1001-432—Constitutional Law II (S,Odd)

3 hrs. cr.

Studies constitutional principles related especially to the area of due process and equal protection of the law. Attention will be given to judicial behavior and the role of federal courts in the policy-making process.

# 45.0801-450—English Constitutional History

3 hrs. cr.

(See History 450)

#### 45.1001-498— Seminar in Political Science (Demand)

3 hrs. cr.

Covers specialized knowledge and/or current research in the discipline. Topics will vary by situation and instructor. Students will prepare and critique papers based on original research. Prerequisite: 9 hours of upper division political science.

#### 45.1001-499—Independent Study (F,S)

1-3 hrs. cr.

For the student who wishes to do an in-depth study of some specialized topic or who wish to pursue a topic not considered in the department's course offerings. The student will select an adviser from the political science faculty. This advisor will structure the independent study in consultation with the student and with the approval of the department head. Prerequisite: Junior or senior status and an overall cumulative grade point average of 3.0 or better. Registration for this course must be approved by the department head and the school dean.

# **PSYCHOLOGY**

# School of Education and Psychology

Babbitt, Forster, Griffin, Junkins, Paige, Starkey, Volskay

The Department of Psychology offers three degrees: Bachelor of Arts (AB), Bachelor of Science (BS), and Bachelor of Science in Education with a major in Psychology-Special Education (BSE). See specifics below.

# **Bachelor of Arts Degree**

The major for the Bachelor of Arts degree consists of 35 semester hours and must include: Psy. 110 or 100 and 300, 311, 312, 411, 442, 451, 452, 480, and 481. Further, 7 hours must be selected from the following: Psy. 298, 310, 341, 382, 422, 432, 498, and 499. A supporting area of 21 hours is also required and may be selected from the following: Art, Music, Economics/Finance, English/Literature, History, Journalism, Law Enforcement, Marketing/Management, Military Science, Political Science or Sociology. Other supporting areas may be selected, but must be approved by an advisor and the department.

# **Bachelor of Science Degree**

The major for the Bachelor of Science degree consists of 35 semester hours and must include: Psy. 110 or 100 and 300, 311, 312, 411, 442, 451, 452, 480, and 481. Further, 7 hours must be selected from the following: Psy. 298, 310, 341, 382, 422, 432, 498 and 499. A supporting area of 21 semester hours is also required and may be selected from any one of: Biology, Chemistry, Computer Science, Mathematics, or Physics. Other supporting areas may be selected, but must be approved by an advisor and the department. However, 10 additional hours of science may be required with other supporting areas.

# Bachelor of Science in Education with a Major in Psychology-Special Education

Students who plan to teach special education (K-9) and/or Psychology (Secondary) should pursue the BSE with a major in Psychology-Special Education. Satisfactory completion of the degree requirements entitles the graduate to Missouri State Department of Education teaching certificates in Psychology and three areas of Special Education (Educable Mentally Retarded, Learning Disabled, and Emotionally Disturbed).

All students must make application to admission to the Teacher Education Program as explained in the Education section of this catalog. In addition to the General Education Requirements for all baccalaureate degree candidates, specific requirements for the BSE in Psychology/Special Education fall into three areas (1) 29 hours of Psychology: Psy. 110, 302, 310, 311, 312, 382, 411 or 442, 432 and 451; (2) 39 hours of professional education in Special Methods: Educ. 330, 312, 324, 331, 342, 343, 370, 403, 404, 405, 420, 430 or Speech 492, Educ. 446, 470 and 474; (3) 17 hours during the professional semester: Psy. 412, Educ. 402, 407, 432 and 444.

#### 42.0101-100—General Psychology (F,S)

3 hrs. cr.

An introductory course, stressing the importance of the psychological mechanisms underlying all human behavior. This course satisfies the General Education Requirement; however, Education majors should substitute Psy. 110. Do not enroll in this course if you have already taken Psy. 110.

42.0601-105—Self-Awareness and Career Planning (F,S)

1 hr. cr.

A course designed to study material and methods which will help the individual investigate his present life style. Concrete methods of decision making and goal setting will be presented. Concentrated career/vocational choice sessions will be presented to help students determine an appropriate career. This course is offered during the second half of each semester. No credit toward psychology major.

42.0701-110—Psychology of Human Development (F,S) 5 hrs. ci

An intensive study of the science of psychology; genetic, physiological, intellectual, social, and personality principles and concepts as they affect child and adolescent development and behavior. A ten-clock-hour observation is required. This course fulfills the General Education Requirement, but is primarily designed for Education and Psychology majors. Do not enroll in this course if you have already taken Psy. 100.

42.9999-120-Freshman Orientation (F,S)

1 hr. cr.

This course is designed to help the student become adjusted to the college environment. Beginning with personal adjustment and rules and regulations, the course broadens its scope to vocational orientation. It culminates with the advising and enrolling of the student in classes for the next semester. No credit toward psychology major.

42.9999-205—Job Search Techniques (F,S)

2 hrs. cr

An elective course designed to study material and methods which will help the graduating student in seeking employment and improving his/her interview skills. A basic goal is to build a positive style of decision making. The content will be a valuable tool for the degree candidate in the preparation of his/her required placement credential file. This course will not meet General Education or Psychology Major requirements.

42.9999-221—Psychology of Personal Adjustment (F)

3 hrs. c

A study of selected principles of adjustment in psychology, therapeutic approaches to improving adjustment, and research being conducted in the area. The goal is to enable the student to be more assertive and personally satisfied.

42.9999-298—Special Topics in Psychology (Demand)

1-3 hrs. cr.

A study of special topics in Psychology not normally included in other courses. Prerequisites to be determined by the department.

42.0701-300—Child Development (F,S)

3 hrs. cr.

Behavior and growth patterns of children from conception to puberty are studied. Psychological findings are presented which are relevant to how children learn, solve problems and function in home and school environments. Prerequisite: Psy. 100. Do not enroll in this course if you have already taken Psy. 110.

42.0701-301—Adolescent Psychology (F,S)

3 hrs. cr.

A study of the development of the attitudes, interests, problems and adjustment of the adolescent. A foundation for the proper evaluation of adolescent behavior. Prerequisite: Psy. 100. Do not enroll in this course if you have already taken Psy. 110.

13.1001-302—The Exceptional Child (F,S)

2 hrs. cr.

A series of awareness experiences which deal with the added complexities an exceptional child presents to a regular classroom teacher. Includes characteristics of the exceptional child, resources in the community, and legislation which determines school policy. Prerequisite: Psy. 110 or Psy. 300 or Psy. 301.

13.0801-310—Educational Psychology (F,S)

2-3 hrs. cr.

Study of the psychological problems involved in education and the practical application of psychological principles of teaching. Special emphasis placed on measurement, the nature of learning, and the environmental influences of behavior. Prerequisite: Psy. 110; or Psy. 300 or Psy. 301.

# 42.1501-311—Applied Statistics for the Behavioral and Natural Sciences (F,S)

3 hrs. cr.

An introductory course which includes both descriptive and inferential techniques. Emphasis is placed on the analysis and interpretation of data. Prerequisite: Psy. 100 or Psy. 110 and Math 110, 130, or 131.

#### 42.0801-312—Experimental Psychology (F,S)

5 hrs. cr.

This course introduces the student to the research process as a foundation for knowledge in the field of psychology. It is a laboratory course that stresses the acquisition of basic skills in conceiving and carrying out research, as well as analyzing results and writing reports in a professionally acceptable manner. Prerequisite: Psy. 311.

## 42.1601-341—Social Psychology (F)

3 hrs. cr.

Study of the social behavior of the individual, interests and tendencies that grow out of the community life in terms of inter-group and inter-personal relationships. Prerequisite: Psy. 311.

# 42.9999-382—Introduction to Behavior Management (S) 3 hrs. cr

An introductory course in the techniques of modifying human behavior through principles developed by learning psychology. Emphasis is placed on the design and implementation of the behavioral strategy in the laboratory as well as practical settings. Prerequisite: Psy. 110 or Psy. 100.

# 42.0801-411—Psychology of Sensation and Perception (S) 3 hrs. cr.

The nature of perception is explored through an examination of the action of the various sensory systems, such as vision and audition. Prerequisite: Psy. 110 or 100. At least one course in biology is strongly recommended.

# 42.1301-412—Measurement and Evaluation in Education and Psychology (F,S)

2-3 hrs. cr.

A study of test construction and item analysis. Practice in evaluating and selecting tests, in administering and scoring, and in the analysis and presentation of test results. Prerequisite: Psy. 310 or Psy. 311. (Offered in the professional semester for 2 hrs. only).

#### 42.1001-422—Theories of Personality (S)

3 hrs. cr.

This course is to present an organized summary of the major contemporary theories of personality. Relevant validation research and over-all evaluation of the application of each theory will be considered. Prerequisite: Psy. 100 or Psy. 110, and consent of instructor.

#### 42.9999-432—Abnormal Psychology (S)

3 hrs. cr.

Emphasizes the recognition and classification of the systems of mental disorders, specifying causes and possible therapeutic techniques. Extensive use of the American Psychiatric Association's "Diagnostic and Statistical Manual" of Mental Disorders. Prerequisite: 7 hours of Psychology or permission of the instructor.

#### 42.1101-442—Physiological Psychology (F)

3 hrs. cr.

The study of brain function and brain-behavior relations with overviews of neuroanatomy, neurochemistry, nerve membrane potential, electrical and chemical aspects of synaptic transmission, sensory and motor aspects of brain function, and the interpretive aspects of brain function in relation to behavior. Prerequisite: Psy. 100 or Psy. 110. At least one course in Biology is strongly recommended.

#### 42.0301-451—Learning and Memory (S)

3 hrs. cr.

Designed to acquaint the student with the major issues and current research findings in the area of learning and memory. General topics include transfer of training, attention, memory system approaches as well as other selected topics. Prerequisite: Psy. 312.

42.9999-452—History and Systems of Psychology (F)

3 hrs. cr.

A study of the various systems of psychology based on historical antecedents and their effects on contemporary scientific psychology. Prerequisite: Psy. 311, or consent of instructor.

42.1301-471—Individual Testing (F)

3 hrs. cr.

Practice in the administration and interpretation of individually administered intelligence tests, including the Stanford Binet and the three Wechsler tests. Prerequisite: Psy. 311 or Psy. 412. Offered only by request. Contact the Department Head if interested.

42.1301-474—Educational-Psychological Testing (S)

3 hrs. cr

A comprehensive study of the various psycho-educational assessment techniques, including educational, intellectual, and psycho motor. Emphasis will be placed on translating assessment data to remedial programs.

42.9999-480—Senior Seminar (F)

2 hrs. cr.

For senior Psychology majors, this course provides information and experiences helpful in making decisions about, and preparing for careers, emphasizing preparation for either graduate school, or baccalaureate level employment. It also provides an opportunity for students to become familiar with the professional interests and activities of the Psychology Department faculty, in preparation for selecting Senior Thesis topics.

42.9999-481—Senior Thesis (S)

1 hr. cr.

Provides the student with an opportunity to develop his/her skills in reviewing, and critically evaluating the professional literature of Psychology, and using these skills in producing a senior thesis. Prerequisite: Senior Seminar.

42.9999-498—Seminar in Psychology (Demand)

1-3 hrs. cr.

The seminar meets regularly each week. Meeting time per week is equal to the number of credit hours determined by the department for a given semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Junior-senior standing and consent of the instructor.

42.9999-499—Independent Study (Demand)

1-3 hrs. ci

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by adviser and Department Head.

## RADIOLOGIC TECHNOLOGY

# School of Technology

#### Beals

The Associate of Science degree in Radiologic Technology combines successfully with a complete clinical training at St. John's Regional Medical Center or other accredited clinical facilities with which an agreement is made, and the prescribed academic curriculum of Missouri Southern State College. Upon successful completion of the curriculum, the individual is eligible to take the National Registry examinations to become a registered Radiologic Technologist.

The Associate of Science in Radiologic Technology requires, in addition to the general education courses (see page 57), all Radiology courses, Bio. 221, Rad Bio 240, Psy. 221, and Chem. 100. Applicants who have not met the prerequisites for Bio. 221 must complete them before being admitted to the program.

In addition to established fees for all college students, special fees of \$100 for the first semester and \$40 for each succeeding term, including summers, are required for enrollment in Radiology courses.

Students who are already registered radiologic technologists may also enter this program.

Credit equal to the credit given at the time radiologic technologists enter Missouri Southern for Radiological courses is granted the individual. A minimum of 30 additional academic semester hours is required. This credit would include the general education requirements for the Associate of Science degree plus a concentration of courses in one of the subject-matter areas of business (Accounting and Secretarial Procedures or Business Management), behavioral sciences, or natural science (concentration in either Biology, Chemistry, or Physics).

The Associate of Science in Radiologic Technology requires the completion of all Radiologic Technology courses, specified supporting science classes and general education requirements for the Associate of Science. Deviations from the suggested order of study must have adviser approval.

#### 17.0209-101—Introduction to Radiology

3 hrs. cr.

An introduction to the radiology department, including basic procedures and equipment. The course includes organization, function, and supervision of a Radiology Department with a history of X-ray, ethical principles, and legal aspect of technology and elementary radiation protection. 2 hrs. lecture and 2 hrs. lab per week.

#### 17.0209-111—Medical Terminology

3 hrs. cr.

Provides a background in the language of medicine, especially as related to radiology, through a comprehensive study of the more common medical roots, prefixes and suffixes. Every attempt is made to relate medical roots to everyday English words. A survey of medical and surgical diseases is included. 3 hrs. of lecture per week.

# 17.0209-121—Patient Care and Special Procedures in Radiology

3 hrs. cr.

Routine and special care of the patient. Course includes sterile techniques, preparation of contrast media, special attention is given to the visualization of the digestive, urinary and reproductive organs. 3 hrs. lecture per week.

#### 17.0209-132—Principles of Radiographic Exposure

3 hrs. cr.

The fundamental principles of technique and technique conversion with particular emphasis on the factors that directly and indirectly affect radiographic exposure. Emphasis on radiation protection and dark room chemistry and techniques are also included in this course. 3 hrs. lecture per week.

#### 17.0209-142—Radiographic Positioning I

3 hrs. cr.

Basic radiographic positioning including both standard and specialized position of the extremities and spine. Film critique and radiation protection are included. 2 hrs. lecture, 3 hrs. lab, and 12 hrs. clinic per week.

#### 17.0209-160-Film Critique

2 hrs. cr.

Develops a student's ability to evaluate X-ray films as to technical quality and diagnostic interpretation. 2 hrs. lecture per week.

#### 17.0209-170—Radiologic Physics

3 hrs. cr.

The physics of radiology. The physical principles of X-ray production. Including theory in electricity, rectification, circuitry, and basic equipment maintenance. 3 hrs. lecture per week.

#### 17.0209-180-Practicum in Radiology I

4 hrs. cr.

Intensified clinical training in the areas of urology, surgery, special procedure, fluroscopy and general radiography. Course meets for 12 weeks summer session. 35 hrs. clinic per week.

17.0209-241—Radiographic Positioning II

3 hrs. cr.

An in-depth study of routine and special views of the skull and facila bones. Film special views of the skull and facial bones. Film critique, radiation protection, and skull anatomy review included. 2 hrs. lecture, 3 hrs. lab, and 20 hrs. clinic per week.

17.0209-252—Radiographic Positioning III

3 hrs. cr.

Procedures and techniques for examination of various organs, including vascular studies and all special procedures. Course includes film critique, radiation protection and review of vascular anatomy. 3 hrs. lecture and 20 hrs. clinic per week.

17.0209-282 - Practicum in Radiology II

z nrs. c

Advanced clinical training. Course includes an introduction to the responsibility of patient flow control. 20 hrs. clinic per week.

17.0209-290-Practicum in Radiology III

4 hrs. cr.

Professional clinical training in which the student controls patient flow. Special attention is given to final training in special procedures and surgery. Course includes radiation therapy. Course meets 12 weeks summer session. 35 hrs. clinic per week.

17.0209-299-Advanced Radiology

3 hrs. cr.

A comprehensive review of the field of radiology including innovations, trends and anticipated advancements in the field. 3 hrs. lecture per week.

## RESERVE OFFICER TRAINING CORPS

(ROTC)

See Military Science

#### SOCIOLOGY

# School of Arts and Sciences Department of Social Sciences

J. Conboy, Department Head; Conboy; Gubera; Kellner; Tate

A bachelor's degree with a major in sociology prepares the student for a variety of occupations and graduate programs. Selecting from three bachelor's degree programs including a Bachelor of Arts, Bachelor of Science, or Bachelor of Science in Education, the student may choose to pursue many careers, for example, those in human and social services, public safety occupations or teaching. Advanced graduate or professional school training could also be a choice for the student who successfully completes one of the bachelor degree programs. A social work emphasis is provided within sociology's course offerings by classes focusing on human and social services.

Requirements for a major in sociology for the Bachelor of Arts degree consists of 30 semester hours in sociology including Soc. 110, 210, 311, 321, 421, 432. Three upper division semester hours of sociology electives, and a 3-hour course in statistics must also be completed. Additional requirements are 15 semester hours in a supporting area which must be approved in advance by an adviser

in sociology.

Requirements for a major in sociology for the Bachelor of Science degree consists of 36 semester hours in sociology including Soc. 110, 152, 311, 362, 421, 432, and 18 semester hours of electives in sociology with emphasis on upper division hours. Additional requirements are Comp. 100 and 120, Math 310 or Psy. 311, and 3 semester hours in geography. Math 130 or 131 is a prerequisite to the required computer and statistics courses and is recommended to satisfy General Education requirements.

Requirements for a major in social sciences - sociology emphasis - for the Bachelor of Science in Education degree with social sciences as the only teaching field (Plan B) consists of 54 semester hours in social sciences. Included are: Soc: 110 or 152, 121, 210, 321 and 9 semester hours of sociology electives 6 of which must be upper division; Hist. 110, 120, 130, 140, 6 upper division semester hours of U.S. History and 3 upper division semester hours in European History; PSc. 120 and 3 semester hours of political science electives: Geog. 211, and Econ. 180 or 3 semester hours in an equivalent economics course. Teacher Education requirements are explained on page 106. For purposes of graduation and certification, the student is urged to become familiar with the Teacher Education requirements in addition to those within the social sciences major.

Sociology 110 is a prerequisite to many upper division courses in sociology.

Sociology 110 is an elective course which satisfies 3 credit hours of the General Education requirements for Behavioral and Social Sciences.

#### 45.1101-110—Introduction to Sociology (F,S)

3 hrs. cr.

An introduction to the systematic study of society. The emphasis is on the major concepts of sociology and the scientific point of view in dealing with social phenomena. Satisfies a General Education requirement for either a Bachelor of Arts or Bachelor of Science degree.

#### 45.1101-121—Family (F)

3 hrs. cr.

The study of paired relationships, marriage as the genesis of family life, elements in the preparation for marriage and parenthood, and the development of family relationships throughout the life cycle.

#### 45.0010-152—Introduction to Anthropology (S)

3 hrs. cr.

An introduction to both physical and cultural anthropology with particular emphasis on the anthropological concept of culture and the human capacity for society. Major attention is also given to human evolutionary development and cultural diversity within the framework of non-industrial societies.

# 45.1101-210—Social Problems (F,S)

3 hrs. cr.

An investigation into the causes and consequences of economic, political, and social problems that significantly affect society and the quality of life in it. Course emphasis is focused on the elements and processes within the structure of American society rather than on individual pathologies and behaviors as causes of social problems. Some analysis of possible solutions is also included. Prerequisite: Soc. 110.

#### 45.1101-265—Introduction to Social Gerontology (F, Even) 3 hrs. cr.

An introduction to the field of aging studies with particular emphasis on needs and areas of concern, methods for gathering information, aging theories, delivery of services and current research in the gerontological literature. Students will investigate the emergence of "aging" as a recent phenomenon related to man's society, modern technology, and family/community changes. Such areas as retirement, illness, and alternative life styles will be analyzed. Prerequisite: Soc. 110.

### 45.1101-291—Social Change (Demand)

3 hrs. cr.

Study of the causes, processes, and consequences of social change. A look at the significant theories of social change and an emphasis on how major social institutions are effected by patterns of change and the possible consequences of institutional change for society in the future.

# 45.1101-298—Topics in Sociology (Demand)

3 hrs. cr.

Special sociology topics of current interest to the student. Subjects and instructors may vary each semester. Students are encouraged to submit areas of interest to the Social Science Department.

### 45.1101-301—Sociology of Religion (F)

3 hrs. cr.

A study of religion as a social institution. Compares religions for behavioral content. Major attention is given to the relationship of religion to other social institutions in contemporary society. Prerequisite: 6 hrs. of sociology.

#### 45.1101-311—Social Stratification (F)

3 hrs. cr.

An examination of differences in power, prestige and influence. Analyzes the impact of social inequality on people's lives, especially in the United States. Offers theoretical explanations for the variations in social class. A practical investigation of social class is usually incorporated in the course requirements. Prerequisite: Soc. 110.

# 45.1101-312—Juvenile Delinquency (S)

3 hrs. cr

Consideration is given to environment and social background for the study of juvenile delinquency. Emphasis is placed upon factors of causation as revealed through personal, family and community situations conditioning delinquent behavior; analysis of concrete cases of juvenile delinquency; and examinations of current methods of dealing with juvenile offenders and programs for the prevention of delinquency. Prerequisite: Soc. 110 and 210.

#### 45.1101-321—Social Institutions (F)

3 hrs. cr.

An exploratory analysis of the social institutions of the economy, government, family, law, and religion as they impact social relationships. Emphasis is placed on complex organizations, using a systems approach. Prerequisite: Soc. 110.

#### 45.1101-331—Introduction to Social Work (F)

3 hrs. cr.

A study of the philosophical and historical development of Social Work as a professional career. Focus is on the settings of practice, on the roles of the Social Worker, and on professional ethics and community support. Prerequisite: Soc. 110, and either Soc. 121 or 210.

#### 45.1101-332—Skills in Social Service Delivery (S)

3 hrs. cr.

Sequential to Soc. 331. Focuses on methods of identifying and assessing problems in social services, obtaining information and developing skills needed to initiate, enhance, or restore relationships between people and social institutions.

# 42.1601-341—Social Psychology (F)

3 hrs. cr.

(See Psy. 341)

#### 45.1101-351—Criminology (F)

3 hrs. cr.

An examination of the social-cultural concepts of crime and the theories, agencies and institutions which deal with offenders. Particular attention is given to treatment of the offender, the causation of criminal and anti-social behavior, as well as to programs of crime prevention. Prerequisite: Soc. 110 and Soc. 210.

#### 45.1101-352—Group Dynamics (S)

3 hrs. cr.

A study of the processes underlying group interaction and action emphasizing the importance of leadership and communication in social organization. Prerequisite: Soc. 110.

45.0501-361—Social Demography (F)

3 hrs. cr.

The changes in population are stressed through an analysis of birth rates, death rates, and migrations. Demographic and ecological factors are stressed in relation to social stratification, ethnic and minority groups, and cultural settings. Prerequisite: 6 hrs. of sociology.

45.1101-362—Deviant Behavior (S)

3 hrs. cr.

The study of theoretical explanations of socially disapproved behavior from the sociological perspective and the application of these concepts to specific forms of deviance. The social nature of conforming behavior is also analyzed as a way of increasing understanding of deviant behavior. Prerequisite: Soc. 110 or consent of instructor.

45.1101-382—Minority Groups and Race Relations (S)

3 hrs. cr.

The study of racial and cultural groups focusing on the conditions of groups within the United States. Analyzes several general theories or explanations for minority-dominant relations. Includes a study of legislation effecting minorities in the U.S. Prerequisite: Soc. 110.

45.1101-391—Penology and Corrections (F)

3 hrs. cr.

A survey of the history, philosophy, and operation of penitentiary systems with special attention given to changes in adult and juvenile institutions. Probation, parole and various strategies for community treatments and therapies will be reviewed and evaluated. Prerequisite: Soc. 110, 210, 351.

45.1101-402—The Community—Rural and Urban (S)

3 hrs. cr.

A survey of the operation of social processes in groups which share common bonds of territory and cultural interests. Limited attention to the international community. Major attention to the American scene, including the regional, rural, urban, ethnic, and subculture communities. Prerequisite: 9 hrs. of sociology.

45.1101-421—Sociological Theory (F)

3 hrs. cr.

A study of classical and contemporary theory placed in historical perspective. An analysis and interpretation of social groups, social organizations and social systems through the study of social thought from Auguste Comte to those in the modern period. Prerequisite: 9 hrs. of sociology.

45.1101-432—Sociological Research Methods (S)

3 hrs. cr.

A study of the methods of problem and hypotheses formulation and data collection, including interviewing and instrumentation. Focuses on the analysis of research findings and ethical procedures. Emphasizes survey designs employed in sociological inquiry. Prerequisite: 12 hrs. of sociology.

45.1101-442—Mobs, Movements and Mass Society (Demand) 3 hrs. cr.

A study of the collective behavior of people including an examination of such phenomena as fads, crazes, social movements, mobs, riots, crowds and publics. Prerequisite: Soc. 110 or consent of the instructor.

45.1101-498—Seminar in Sociology (Demand)

3 hrs. cr.

A seminar for upper division sociology majors. The topics covered and methods used will place emphasis on student-instructor interest, desire to pursue in-depth research, and ability to assimilate topics. It will include areas not already treated in other sociology courses. Permission of instructor required.

45.1101-499-Independent Study (Demand)

1-3 hrs. cr.

An independent study structured by the adviser with the approval of the department head and school dean. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by the department head and school dean.

#### SPEECH DEPARTMENT

(See Communications Department)

## THEATRE

# School of Arts and Sciences Department of Fine Arts

Brietzke, Director of Theatre; Bowman; Claussen; Hunt

Specialized theatre training provides career opportunities in theatre performance, public relations, technical theatre, T.V. and radio (performance and technical), recreational director for youth and geriatrics programs, personnel management, and positions in government service. Preparation for teaching and graduate study is also available. A major in theatre affords the student a broad liberal arts education.

Requirements for a major in theatre for the Bachelor of Arts degree are 46 semester hours in theatre including Th. 142, 231, 232, 233, 241, 331, 332, 341, 351, 362, 372, 422 or 431, 441, and 4 semester hours from 121, 122, 221, 222. Additional requirements are 9 hrs. including Art 100 or 130, 301 or 302, and Hist. 130 or 140. Recommended electives: Acct. 101, 102, Bus. 101, Comm. 212, Eng. 450, 451.

Requirements for a major in speech communication and theatre for the Bachelor of Science in Education degree with speech communication and theatre as the only teaching field (Plan B) are 44 semester hours in speech communication and theatre. Included are Comm. 215 or 304, 212, 315, and 2 semester hours of forensics workshop; Th. 142, 331, 332, 351, and 2 semester hours of theatre laboratory; and 19 semester hours of additional courses in speech communication and/or theatre including 3 upper division semester hours. The 19 hours must be approved in advance by the student's adviser who must be selected from either the area of speech communication or of theatre. See page 106 for teacher education requirements.

Requirements for area of concentration grades 1-8 in theatre/speech are 9 hrs. in theatre including Th. 110, 351, 431. Additional requirements are 6 semester hours in speech including Comm. 212, 215, and Educ. 344.

#### THEATRE OFFERINGS

50.0501-101, 102, 201, 202, 301, 302, 401, 402 -Theatre Performance (F,S)

1 hr. cr.

The performance of a role or service as stage manager for a theatre production which has met departmental standards. A student may accumulate up to 5 hours of credit. Credit is applied after departmental evaluation at the end of each semester.

50.0501-110—Theater Appreciation (F,S)

3 hrs. cr.

A basic approach to the what, why, and how of theatre. Sessions deal with dramatic form and style of drama, as well as physical aspects of production. Satisfies 3 semester hours for general education requirement in humanities and fine arts.

50.0501-121, 122, 221, 222, 321, 322

Theatre Laboratory (F,S) 2 hrs. cr.

A laboratory devoted to mounting the theater's season. Meets two hours in sequence twice a week.

50.0501-142—Theatre Technology (S, Even)

3 hrs. cr.

An introduction to scenery construction techniques and terminology, technical drawing as applied to theatre design, state lighting techniques, sound techniques, and stage rigging.

50.0501-201—Summer Theatre Production (Demand)

6 hrs. cr.

Opportunity for participation in summer theatre production. Enrollees will be active members of MSSC Repertory Theatre Company serving as actors, designers, and technicians in varied theatre fare. Month of June devoted to preparation, and four weeks of 16-20 performances in July.

50.0501-231—Speech for Stage (F,Odd)

1 hr. cr.

A lecture-demonstration experience designed to develop or improve student's projection, phrasing, emphasis, and vocal resonance.

50.0405-232—Costume Technology (F,Odd)

1 hr. Cr.

Basic skills for the stage are developed in areas of sewing, use of patterns and the selection and use of fabrics. Two class hours in sequence.

50.0405-232—Costume Technology (F,Odd)

1 hr. cr.

Basic skills for the stage are developed in areas of sewing, use of patterns and the selection and use of fabrics. Two class hours in sequence.

50.0501-233-Stage Make-up (F,Odd)

1 hr. cr.

Provides the student with basic techniques in design and application of stage makeup. Surveys categories of professional make-up as well as sources and costs of materials. Two class hours in sequence.

50.0501-241—Acting I (F,Odd)

3 hr.s cr.

Basic acting techniques for development of poise and confidence on stage; stage movement and pantomime; character analysis and creation.

50.0501-298—Exploration in Theatre (Demand)

Concentrated study on a variety of selected theatre topics. Each offering may be on a different subject. A student may repeat course but may take same topic only once.

50.0499-320—Stage Lighting (Demand)

3 hrs. cr.

Lighting design approached artistically. The use of light in art, television, theatre, and motion pictures. Prerequisite: Th. 142.

50.0501-331—History of the Theatre (F, Even)

3 hrs. cr.

A study of the theatre from primitive times through the Elizabethan period. Theatre and stage architecture, scene design, acting styles, theatre management, and the culture surrounding the theatrical event are discussed and their relationship to dramatic literature analyzed.

50.0501-332—History of the Theatre (S,Odd)

3 hrs. cr.

Plays, playwrights, and dramatic criticism from the Elizabethan and Jacobean era to contemporary theatre and the evolution of the physical theatre, staging and production practices.

50.0501-341—Acting II (F, Even)

3 hrs. cr.

The dynamics of analysis, rehearsal and performance of scenes from contemporary and classic plays. Emphasis on the actor's relationship to the play and to other actions. Prerequisite: Acting I or permission of instructor.

50.0501-351—Directing I (F, Even)

3 hrs. cr.

A basic approach to theatre management and organization. Techniques and procedures in play selection and mounting a production. Analysis of conventional dramatic structure and exploration of directorial preparation of scripts.

50.0405-362—Stage Costume and Design (S, Even)

3 hrs. cr

Survey of clothing styles and social manners in western civilization with emphasis upon theory and practical application as it relates to design of the stage costume.

50.0501-372—Directing II (S,Odd)

3 hrs. cr.

Study of the skill and role of the director, script and analysis, casting, production administration, and director-actor relationships. Each enrollee will receive actual directing experience of staging a studio production or assigned a related directing project.

50.0501-422—Acting III (S, Even)

3 hrs. cr.

Lecture and laboratory study of physical manners and speech in relationship to various periods of theatre presentation. Prerequisite: Th. 341 or consent of instructor.

50.0501-431—Creative Dramatics (Demand)

3 hrs. cr.

Methods and techniques of teaching dramatic improvisation through the exploration of literature appropriate for dramatic presentation with an emphasis upon story telling.

50.405-441—Stage Design (F, Even)

3 hrs. cr.

Foundations of scenic design, sketching, rendering, and scene painting techniques. Set design as related to various styles of drama.

50.0501-498—Theatre Studies (Demand)

3 hrs. cr.

Seminar in theatre for advanced students. Topic open. Approval of department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in course must be approved by adviser, department head, and school dean.

50.0501-499—Independent Study Theatre (F,S)

1-3 hrs. cr.

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field with GPA of 3.0. Registration in the course must be approved by adviser, department head and school dean.

# Combined/Affiliated Degree Programs

Missouri Southern State College has established several combined degree programs whereby the student completes a structured number of academic hours under the regulations established by College and combines with this the satisfactory completion of the professional/occupational curriculum from a school with which the College has an agreement. Some of the combined programs lead to a Bachelor's (four-year) degree, while others lead to an Associate (two-year) degree. A description of these programs follows:

# BACCALAUREATE DEGREE PROGRAMS

#### (Basic Requirements for All Programs)

- Complete 94 semester hours at Missouri Southern State College. Transfer credit will be considered, but the last 30 of the 94 required semester hours must be earned at MSSC.
- The 94 hours must include the completion of the general education requirement plus the specialized course required by the program in which the student is enrolled.
- 3. Sixteen out of 94 semester hours must be upper division (300 and 400 level courses.)
- 4. All applicable "Requirements for Graduation" as stated in the Missouri Southern State College catalog must be met including the application for degree candidacy, the graduation fee, and the filing of credentials with the Placement Office.
- A transcript from the institution with which a combined degree agreement is arranged must be provided in order to complete the requirements for a degree.

# **Engineering:**

A combined degree may be arranged with approved and accredited colleges of engineering when the two institutions agree on a student applicant for the program. The student must complete three semesters at the school of engineering at "C" average or above and be certified eligible to continue in the engineering school. The Vice President for Academic Affairs negotiates the agreements with other institutions.

#### Medicine:

The Missouri Southern State College student applying for a combined degree with an approved and accredited school of medicine must normally have a "B" or better grade average to be considered. The Vice President for Academic Affairs, will work out a combined degree with the school of medicine if the candidate is accepted for admission into the medical school. The student must complete three semesters in the medical school with a grade average of "C" or above and be certified eligible to continue in the school of medicine.

#### Law:

A combined degree may be arranged with approved and accredited colleges of law when the two institutions agree on a student applicant for the program. The Missouri Southern State College student applying for a combined degree with an approved and accredited school of law must normally have a "B" or

#### **COURSES OF INSTRUCTION**

better grade average to be considered. The Vice President for Academic Affiars will work out a combined degree with the school of law if the candidate is accepted for admission into the law school. The student must complete three semesters in the law school with a grade of "C" or above and be certified eligible to continue in the school of law.

#### MEDICAL TECHNOLOGY

#### **School of Technology**

The Bachelor of Science in Medical Technology is granted to students who complete the required program of study satisfactorily. These requirements include the basic requirements for all combined/affiliated Baccalaureate Degree programs as stipulated on page 177 of this catalog plus 32 hours of professional course credits. The completion of this degree is required before an individual

is eligible to take the certifying examination.

Missouri Southern State College has affiliation agreements with the schools of Medical Technology at St. John's Medical Center, Joplin; St. John's Regional Health Center, Springfield, MO; Lester E. Cox Medical Center, Springfield, MO, and Research Medical Center, Kansas City, MO. If a student wishes to attend an accredited school of medical technology with which the College has no formal agreement, the Vice President for Academic Affairs can negotiate an agreement for the individual student. Students should be aware that enrollment in the professional schools is limited. Each of the professional schools has its own admission criteria and selects those students to be admitted to a class from the applicants for that class. In general, this selection is based on the academic record of the individual plus recommendations and indicated or demonstrated aptitude for the medical field. Students are responsible for filing their own application for admission with the professional schools. The student should file his application with the professional school during the early Fall of his junior year, or approximately ten (10) months prior to the date he expects to enter.

Students who are unsuccessful in gaining admission to a professional school can normally select and complete another science major with the advice of the

appropriate department head.

A student may enroll in the professional courses either at the hospital-based school or through Missouri Southern State College, depending on the policies of the hospital-based school. Students enrolled at the hospital-based school are not considered members of the Missouri Southern State College student body, since the hospital-based school in such cases is considered as any other accredited institution of higher education. A student enrolling through Missouri Southern State College is considered a member of the College student body and is therefore eligible for benefits offered all students.

The weekly time requirements for the professional medical technology courses (400 level) listed are based on the minimum requirements for a course meeting for a normal academic term for a minimum of 16 weeks. Actual scheduling of classes may vary according to custom of the individual professional

school to meet these minimum total hour requirements.

Course requirements, in addition to the general education requirements for the Bachelor of Science Degree, are Bio. 121, 231, 305, 306, 361 or 362 and 456; Chem. 101, 102, 201, 300, and 421 or \*351; Phy. 151 and 152; Math 140; and all 400 level MT courses. \*St. John's, Springfield, MO, requirement.

## MEDICAL TECHNOLOGY

18.0901-200—Introduction to Medical Technology (F,S) 1 hr. cr.

A practical experience designed to introduce prospective Medical Technology students to the following areas of a hospital laboratory; Hematology, Coagulation, Urinalysis, Blood Bank, Microbiology, Serology, Radioimmunoassay, and Chemistry.

18.0901-401—Clinical Chemistry (F)

10 hrs. cr.

Analytical and theoretical aspects of the clinical biochemistry of body fluid constitutes utilizing both manual and instrumental techniques including automation and special procedures. 5 hours lecture and 20 hours clinic/laboratory per week.

18.0901-402—Clinical Microscopy (S)

1 hr. cr.

Principles and techniques of the physical, chemical and microscopic examination of urine and other excreta as related to disease processes. 1 hour lecture, clinic by arrangement.

18.0901-403—Hematology (F)

6 hrs. cr.

A study of the cellular elements of blood and bone marrow; theory of cell production, release and survival; morphological characteristics of normal and abnormal cells; quantitative and qualitative abnormalities. Principles and techniques involved in the study of hemostasis, blood coagulation and hemorrhagic disorders. 3 hours lecture, 12 hours clinic/laboratory per week.

18.0901-404—Serology-Immunology (S)

3 hrs. cr.

The science of immunity including antibody development, principles of antigen-antibody interactions, and techniques of serological testing for various disease states. 3 hours lecture, 12 hours clinic/laboratory per week.

18.0901-405—Clinical Microbiology (S)

7 hrs. cr.

Sterile technique, methods of handling and inoculating specimens containing pathogenic microorganisms, isolation and identification of pathogenic microorganisms, laboratory tests in chemotherapy, and diagnostic bacteriology, mycology, and parasitology. 4 hours lecture, 12 hours clinic/laboratory per week.

18.0901-406—Blood Bank-Immunohematoloty (S)

A study of the blood group systems and the immune response. Methods of crossmatching, antibody screening, and phenotyping. Administrative safeguards and legal aspects of blood banking. Proper clinical utilization of blood components. 1 hour lecture, 8 hours clinic/laboratory per week.

18.0901-407—Special Topics in Medical Technology (S)

Instruction will include lecture and/or clinical practice in the areas of in-service Education, Management and Supervision. Research and Development and Principles, and Techniques of the Instructional Process. Lecture and laboratories to be arranged.

## ASSOCIATE OF SCIENCE PROGRAMS

# (Requirements Basic to All Associate of Science Combined Degrees)

1. The completion of 62 academic hours, the last 15 of which must be taken in residence at Missouri Southern State College.

2. The minimum cumulative and major field grade point average must be

2.0 or above.

3. The completion of the general education requirements as outlined in the

catalog for the Associate of Science degree.

4. The student must satisfactorily complete the occupational/professional courses of the affiliated occupational or professional school as required in the agreement between the two institutions.

5. All applicable "Requirements for Graduation" as stated in the Missouri

Southern State College catalog must be met including the application for degree candidacy, the graduation fee, and the filing of credentials with

the Placement Office.

6. A transcript from the institution with which a combined degree agreement is arranged must be provided in order to complete the requirements for a degree.

#### **COURSES OF INSTRUCTION**

# ASSOCIATE OF SCIENCE IN ENGINEERING

A pre-engineering student or technical student at MSSC may earn an Associate of Science Degree in Engineering if he or she completes the following requirements:

- \*A. General Education for Associate of Science Degree
  - B. Mathematics 150, 250 and 260
  - C. Chemistry 101 D. Computer 120
- E. Economics 201 (macro)
- F. Physics 201, 202, 203, and 312
- \*G. Elective: Math/Physics (3 hrs.)
- \*H. Elective: Humanities/Social Science/Drafting (3 hrs.)

\*The student should meet with his or her pre-engineering adviser for the proper selection depending on the field of engineering (see below). +

+ The Math and Physical Science Departments at MSSC in cooperation with the Engineering Staff at the University of Missouri-Rolla have prepared a booklet entitled: "A Model Program for Engineering Transfers". A copy of this book may be obtained from the above departments.



# A Combined One-Course Program

#### Aviation

## School of Technology

This course is offered in affiliation with the Mizzou Aviation Company of Joplin, Missouri.

#### **COURSE DESCRIPTIONS**

#### 15.0801-200—Basic Pilot Training

5 hrs. cr.

An integrated course designed to meet ground school and flight training requirements for eligibility to take Federal Aviation Administration examination for a Private Pilot Certificate. In addition to scheduled ground school classes, course requires approximately 40 hours of dual and solo flight and check flight. Credit awarded when FAA certificate is obtained. Special fees and third class medical certificate required. Special fees for this course include plane rental and examiner's test free. Course grade is recorded as Pass or Fail.

#### **Paramedic Program**

#### School of Technology

This program is offered in cooperation with the Southwest Missouri Emergency Medical Services of Springfield, Missouri.

#### COURSE DESCRIPTION

#### 17.9999-295—EMT-P (Paramedic) (On Demand)

12 hrs. cr.

This twelve semester hour program consists of classroom instruction supplemented by clinical observation and experience. The classroom phase consists of 3, three-hour sessions per week. The clinical training is arranged through an area hospital. Applicants must be at least 18 years of age, hold a high school diploma or equivalent, and possess a current state ambulance license. A minimum of one year experience in the emergency medical field is preferred. Special book and equipment fees are assessed for this course. (For additional information, contact the Continuing Education Office.)

# PRE-PROFESSIOAL AND TECHNOLOGY CURRICULA

# Pre-Professional (Associate of Arts Degree)

The Junior College transfer curricula are designed for students who desire later to work for a baccalaureate degree at Missouri Southern State College, or to transfer to other baccalaureate degree granting institutions. It should be clearly understood by the student that all such institutions have their own entrance requirements, and any student interested in such prospective transfer should consult the latest catalogs of those colleges. The curricula set forth in this section under various headings are ordinarily sufficient to satisfy requirements of other colleges and universities.

Students beginning their education at Missouri Southern State College with the intention of earning a baccalaureate degree should study the general education and major requirements for that degree.

#### ONE-COURSE PROGRAM

The following programs for students planning to enter the fields of Agriculture, Dentistry, Journalism, Medicine, Optometry, and Pharmacy lead to the Associate of Arts degree and are normally transferable to other institutions. Each takes two years and 62 or more semester hours to complete. Programs applicable to other fields may be planned in accord with the criteria stated on page 181. The curricula requirements are:

#### 1. Agriculture.

a. General Education (see page 56).

- b. Five semester hours each in chemistry, botany or zoology and eco-
- c. Three semester hours each in algebra, accounting, psychology (general), and sociology.

d. Ten hours of electives, selected according to transfer needs.

e. All courses must be approved by the adviser.

#### 2. Dentistry.

a. General Education (see page 56).

b. Ten hours of chemistry, four of zoology, five of microbiology, and eight of physics.

c. Six hours of electives, selected according to transfer needs. Check with the Biology Dept. concerning specific transfer needs.

#### 3. lournalism.

The student planning to enter a journalism school must complete 60 credit hours in Arts and Science, including the following specific requirements:

a. General Education (see page 56).	
b. One foreign language	(13 hrs.)
c. Economics	( 3 hrs.)
d. U.S. Government	( 3 hrs.)
e. English Literature	( 6 hrs.)

f. Electives should be chosen from sociology, psychology, philosophy, mathematics, accounting, English and journalism.

#### 4.

Medicine.	
a. General Education (see page 56).	
b. One foreign language	(15 hrs.)
c. Chemistry	(10 hrs.)
d. Physics	( 8 hrs.)
e. Check with the Biology Dept. concerning specific tra	ansfer needs.

## 5. Ontometry

	nomeny.		
a.	General Education (see page 56).		
b.	English Literature	(3 h	rrs.)
	Calculus	(5 h	rrs.)
d.	Zoology	(4h	rrs.)
	Chemistry	(10 h	rrs.)
f.	Physics	(8h	rrs.)
	General psychology	(3 h	nrs.)
h.	Electives, according to transfer needs	(5 h	nrs.)
	Electives to fulfill transfer needs Check with the Riology	Dent o	on-

i. Electives to fulfill transfer needs. Check with the Biology Dept. cor cerning 3 hrs. specific transfer needs.

#### 6. Pharmacy,

Pharmacy.	
a. General Education (see page 56).	
b. Algebra and trigonometry	( 5 hrs.)
c. Biology, zoology and botany	(10 hrs.)
d. General chemistry	(10 hrs.)
e. Physics	( 8 hrs.)
f. Accounting	( 3 hrs.)
g. Analytical chemistry	( 5 hrs )

#### **TECHNOLOGY**

### (Associate of Science Degree)

The courses of study leading to the Associate of Science degree in Automotive Technology, Computer Science, Dental Hygiene, Drafting and Design, Law Enforcement, Machine Technology, Nursing and Radiologic Technology are described in the "Curriculum" section of this catalog under their respective headings.



# THE DIVISION OF CONTINUING EDUCATION, CONFERENCES AND WORKSHOPS

The Division of Continuing Education, Conferences and Workshops is administered by a director. Courses may or may not be in the regular curriculum. They will be offered to meet the community and societal needs. School, business, industry, and civic leaders are requested to make known the educational needs of their areas. The college will strive to meet those needs.

The division is supported by moderate student fees paid by all participants.

The course fees are determined primarily by the length of the class.

Courses offered in the Division of Continuing Education may or may not count toward an associate or baccalaureate degree. Students wishing to apply continuing education semester hour credit toward a college degree must petition for the credit. Petitions are available in the Continuing Education Office. Courses listed in the regular catalog will carry the designated credit.

New courses are announced on a weekly basis. The announcements are

carried by various news media.

Seminar in Managerial Accounting

All continuing Education enrollment is conducted by the Office of the Division located in Room 103 of Hearnes Hall. A permanent record is kept in the Division Office for each student. Students will be provided copies of their records upon request.

Persons wishing additional information are urged to call, write, or visit the Office of the Division of Continuing Education, Conferences and Workshops.

### ASSOCIATE OF SCIENCE ACCOUNTING MAJOR Suggested Order of Study

or of Study

MAJOR CODE 5002

	FIRST	YEAR	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Acct 201 Principles of Acct I	3	Acct 202 Principles of Acct I	3
Eng 101 Composition	3	Gen Ed [Psy 100 or Soc 110]	3
Gen Ed [PSc 120 or Hist 110]	3	Comm 100 Oral Communications	3
GB 115 Business Math/Calculators	3	OA 102 or 200 Typewriting I	3
Math 30 Intermediate Algebra or Math	110	or II	
[Math 131]	3	GB 320 Business Communication	3
Psy 120 Freshman Orientation	1	HPER 101 Intro to P.E.	2
,	16		17
	SECON	D YEAR	
Acct 312 Intermediate Accounting		Acct 401 Tax Accounting (Acct 201)	3
(Acct 201)	4	MM 350 Principles of Management	3
Acct 310 Cost Accounting (Acct 201)	3	Econ 202 Principles of Economics	3
GB 301 Business Law I	3	Gen Ed [Humanities or Fine Art]	3
Gen Ed [Science]	4-5	Elective in Business	3
Econ 201 Principles of Economics	3		15
	17-18		
( ) Prerequisite			
Dept Recommendation		For additional Information Contact:	
Elective must be selected from:		Dean of School of Business	
Business Law II		Office: Business School Bldg.	
Auditing		Phone (417) 624-8100 Ext. 319	
Business Statistics I		7110110 (117) 321 0100 EAR 313	

#### BACHELOR OF SCIENCE BUSINESS ADMINISTRATION ACCOUNTING MAJOR Suggested Order of Study

MAJOR CODE 0502

#### FRESHMAN

	FKESI	TMAIN	
1st Semester		2nd Semester	
Course	lours	Course	lours
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Math 131 Finite Math 3		Gen Ed [Bio 101 General Biology or	
PSc 120 Government: National, State, &		equivalent]	4
Local	3	Gen Ed [Comm 100 Oral Comm]	3
HPER 101 Intro to P.E.	2	Gen Ed [Humanities: Fine Arts]	3
Elective [GB 115 Business Math	-	HPER 160 Personal Health	2
Calculators]	3	- THER TOO PERSONAL FREARIT	
Psy 120 Freshman Orientation	1		15
_	15		
	SOPHO	OMORE	
Acct 201 Principles of Accounting I (Mai	th	Acct 202 Principles of Accounting II	
131)	3	(Acct 201)	3
Econ 201 Principles of Econ	3	Econ 101 Principles of Econ	3
GB 320 Business Communications		Gen Ed [Phys 100 Fundamentals of	,
(Eng 102)	3	Physical Science	5
Gen Ed [Hist 110, or 120, U.S. History]	3	Gen Ed [Humanities: Fine Arts]	3
Gen Ed [Humanities: Literature]	3	Elective [Comp 100, Intro to Data	3
	15	Processing]	2
	15		3 17
	JUN	IOR	
Acct 312 Intermediate Accounting I (Acc	t	Acct 322 Intermediate Accounting II	
202)	4	(Acct 312)	4
Acct 310 Cost Accounting (Acct 202)	3	Acct 401 Tax Accounting (Acct 202)	3
GB 301 Business Law I	3	[GB 302 Business Law II -for CPA exam]	3
MM 350 Principles of Management	3	GB 321 Business Statistics (Math 131)	3
MM 300 Principles of Marketing	3	GB 337 Managerial Data Processing	,
,	16	(MM 350)	3
	10		16
	SENI	I O B	10
Acct 411 Auditing (Acct 322)	3		2) 2
Econ 350 Financial Management	3	Acct 402 Advanced Accounting (Acct 32	,
(Econ 202, Acct 201)	2	Acct 420 Accounting Theory (Acct 322)	3
Electives [Government Accounting.	3	MM 452 Business Policy (Econ 350)	3
3 hours]		Electives	6
5 hours	9		15
	15		
) Prerequisites			
] Dept Recommendations		For Additional Information Contact:	
		Dean of School of Business	
		Office: 117 Business School Bldg.	
		Phone: (417) 624-8100 Ext. 319	

## **BACHELOR OF ARTS**

MAJOR CODE 1002

#### ART MAJOR Suggested Order of Study

#### **FRESHMAN**

Hours 3 3 3 3 3 3 4 1 18	Course H Art 120 Beg. Ceramics (Art 100 or 110) Art 130 Beg. Drawing OR Art 211 Sculpture (Art 100 & 120) Eng 102 Composition [Psy 100 General Psychology or Sociology] Math 110 Intro to College Math HPER 160 Personal Health  Art Requirements	3 3 3 2 17
3 3 3 3 2 1 18	Art 130 Beg. Drawing OR Art 211 Sculpture (Art 100 & 120) Eng 102 Composition [Psy 100 General Psychology or Sociology] Math 110 Intro to College Math HPER 160 Personal Health	3 3 3 3 2
3 3 3 2 1 18	Art 211 Sculpture (Art 100 & 120) Eng 102 Composition [Psy 100 General Psychology or Sociology] Math 110 Intro to College Math HPER 160 Personal Health	3 3 2
3 3 2 1 18	(Art 100 & 120) Eng 102 Composition [Psy 100 General Psychology or Sociology] Math 110 Intro to College Math HPER 160 Personal Health	3 3 2
3 3 2 1 18	Eng 102 Composition [Psy 100 General Psychology or Sociology] Math 110 Intro to College Math HPER 160 Personal Health	3 3 2
2 1 18	[Psy 100 General Psychology or Sociology] Math 110 Intro to College Math HPER 160 Personal Health	3 3 2
2 1 18	Sociology] Math 110 Intro to College Math HPER 160 Personal Health	3 2
2 1 18	Math 110 Intro to College Math HPER 160 Personal Health	3 2
18 nts	HPER 160 Personal Health	2
nts		
nts	Art Requirements	17
	Art Requirements	
0	Art 100 Art Composition	3
3	Art 120 Ceramics	3
3	Art 130 Drawing Techniques	3
4	Art 132 Intro to Design	3
3	Art 211 Beginning Sculpture	3
3	Art 230 Basic Form OR	
3	Art 205 Jewelry Design	3
eog-	Art 232 Beg. Painting	3
	*Art 301 & 302 Art History	9
3	Art 312 Beginning Printmaking	3
3	Art 490 Senior Exhibit	2
ophy	Art Electives approved by advisor	18
6		53
4		
5		
10		
56		
dit Hrs.		
46	For Additional Information Contact:	
53		
10	Office: 303 Art Building	
15		
al: 124		
	6 3 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 bophy 6 4 5 10 5 6 4 5 10 15	6 Art 100 Art Composition 3 Art 120 Ceramics 3 Art 130 Drawing Techniques 4 Art 132 Intro to Design 3 Art 211 Beginning Sculpture 3 Art 230 Basic Form OR 3 Art 205 Jewelry Design 4 Art 232 Beg. Painting 4 Art 312 Beginning Printmaking 5 Art 312 Beginning Printmaking 6 Art 490 Senior Exhibit 6 Art Electives approved by advisor 7 Electives approved by advisor 8 For Additional Information Contact: 9 Director of Art 10 Office: 303 Art Building 15 Phone: (417) 624-8100 Ext 263

<sup>\*9</sup> hours required-select from Art 301, 302, 303 or 304 Art History.

After accumulating 21 hours in Art, the student should make application for admission to Art 490, Senior Exhibit via Junior Review Committee.

# BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0831 ART (Plan B) Suggested Order of Study

#### **FRESHMAN**

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Art 100 Art Composition	3	Art 120 Beginning Ceramics	3
Eng 101 Composition I	3	Eng 102 Composition	3
Econ 180 American Economic System	n 3	Hist 110 or 120 U.S. History	3
Psy 110 Psychology of Human Grow		Math 110 Intro College Math	3
Development	5	Bio 101 General Biology or	
HPER 101 Introduction to P.E.	2	equivalent	4
Psy 120 Freshman Orientation	1		16
·	17		

	SOPH	OMORE
Art 130 Beginning Drawing	3	Art 220 Art Education 3
Art 211 Beginning Sculpture	3	Art 132 Intro to Design or
PSc 120 U.S. Government	3	230 Basic Form 3
Comm 100 or Comm 131	3	Art 232 Beginning Painting 3
Gen Ed [Literature]	3	Gen Ed [Literature or Fine Art] 3
HPER 160 Personal health	2	Phys 100 Fundamentals of Physical
	17	Science 5
		17
	JUN	NOR
*Art 301, 302, 303, 304	3	*Art 301, 302, 303, 304 6
Art 312 Beginning Print making	3	Art Electives 6
Art Electives	3	Ed 300 Clinical Experience 2
Psy 302 Psychology of Exceptional C	child 2	Ed 330 Structure of Teaching Secondary 2
Psy 310 Educational Psychology	2	Ed 331 Microteaching Secondary 2
Elective	3	18
	16	
	SEN	IIOR
Art 490 Senior Studio	2	Professional Semester 16
Art Electives	13	Consult pp. 110-111 of 1981-83 catalog for
Ed 422 Reading in Sec. Sch.	2	specific course requirements
	17	
[ ] Dept Recommendation	• •	
Required Art Credits (50)		
modernos vinterios (30)		For Additional Information Contact:
*O bus required, salest form Aut		Mr. Jon Fowler
		Office: A-303
*9 hrs required; select from Art 301, 302, 303 & 304 Art History		
301, 302, 303 & 304 Art History		Phone: (417) 624-8100 Ext 263
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.		Phone: (417) 624-8100 Ext 263 t make application to Art 490, Senior Exhibit via
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.		Phone: (417) 624-8100 Ext 263
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.	Plan A-Art	Phone: (417) 624-8100 Ext 263 t make application to Art 490, Senior Exhibit via
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.	Plan A—Art	Phone: (417) 624-8100 Ext 263  t make application to Art 490, Senior Exhibit via t instruction/certification for one of two teaching
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS	Plan A—Art SSOCIATE OMOTIVE	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY  MAJOR CODE 5306
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS	Plan A—Art SSOCIATE OMOTIVE ggested O	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY rder of Study  MAJOR CODE 5306
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS	Plan A—Art SSOCIATE OMOTIVE ggested O	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY rder of Study  YEAR
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS AUTO Support S	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY rder of Study  YEAR  2nd Semester
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS  AUTO  Sug  1st Semester  Course	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY rder of Study  YEAR  2nd Semester Course Hours
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS  AUT  Sug  1st Semester  Course  Auto 102 Automotive Engines	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY rder of Study  YEAR  2nd Semester Course Auto 122 Automotive Electrical Systems 6
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS AUTI Support S	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY rder of Study  YEAR  2nd Semester Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS  AUT  Sug  1st Semester  Course  Auto 102 Automotive Engines  Math 30 Intermediate Algebra  Eng 101 Composition	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems & Emission Control 6
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS AUTO Support S	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 3 5	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control Draf 110 Intro to Drafting 3
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS  AUT  Sug  1st Semester  Course  Auto 102 Automotive Engines  Math 30 Intermediate Algebra  Eng 101 Composition	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2
301, 302, 303 & 304 Art History  After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  AS AUTO Support S	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 3 5	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control Draf 110 Intro to Drafting 3
After accumulating 21 hours in Art, Junior Review Committee. Consult catalog for requirements for fields.  ASSEMBLY Support Su	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE MAJOR CODE 5306  TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Hours  Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2 17
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY Support S	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE  MAJOR CODE 5306  TECHNOLOGY rder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2 17  D YEAR Auto 240 Diesel Engines 5
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  Attack  AUT:  Sug  1st Semester  Course  Auto 102 Automotive Engines  Math 30 Intermediate Algebra Eng 101 Composition Phys 100 Physical Science Psy 120 Freshman Orientation  Auto 202 Automotive Chassis Brakes a Suspension	Plan A—Art  SSOCIATE OMOTIVE ggested Or FIRST  Hours 6 3 3 5 1 18  SECONI	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2  TYEAR
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art  SSOCIATE OMOTIVE ggested Or FIRST  Hours 6 3 5 1 18  SECONI and 6 train 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE  MAJOR CODE 5306  TECHNOLOGY rder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2 17  D YEAR Auto 240 Diesel Engines 5
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI and 6 train 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE  MAJOR CODE 5306  TECHNOLOGY rder of Study  YEAR  2nd Semester  Course Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2  17  D YEAR  Auto 240 Diesel Engines 5 Auto 262 Service Management 5
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art  SSOCIATE OMOTIVE ggested Or FIRST  Hours 6 3 5 1 18  SECONI and 6 train 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE MAJOR CODE 5306  TECHNOLOGY  reder of Study  YEAR  2nd Semester  Course Hours  Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2  TO  YEAR  Auto 240 Diesel Engines 5 Auto 262 Service Management 5 Fine Arts Elective 3
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI and 6 train 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE MAJOR CODE 5306  TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Hours  Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2  17  D YEAR  Auto 240 Diesel Engines 5 Auto 262 Service Management 5 Fine Arts Elective 3 Hist 110 U.S. History 1492-1877 OR
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI and 6 train 3 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE  TECHNOLOGY  rder of Study  YEAR  2nd Semester  Course  Auto 122 Automotive Electrical Systems 6  Auto 124 Auto Fuels, Fuel Systems 8  Emission Control  Draf 110 Intro to Drafting 3  HPER 160 Personal Health 2  17  D YEAR  Auto 240 Diesel Engines 5  Auto 262 Service Management 5  Fine Arts Elective 3  Hist 110 U.S. History 1492-1877 OR  PSc 120 [U.S., State &
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI and 6 train 3 3 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE MAJOR CODE 5306  TECHNOLOGY rder of Study  YEAR  2nd Semester  Course Hours Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2 17  D YEAR  Auto 240 Diesel Engines 5 Auto 262 Service Management 5 Fine Arts Elective 3 Hist 110 U.S. History 1492-1877 OR PSc 120 [U.S., State & Local Government] 3
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI and 6 train 3 3 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE MAJOR CODE 5306  TECHNOLOGY rder of Study  YEAR  2nd Semester  Course Hours Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2 17  D YEAR  Auto 240 Diesel Engines 5 Auto 262 Service Management 5 Fine Arts Elective 3 Hist 110 U.S. History 1492-1877 OR PSc 120 [U.S., State & Local Government] 3
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI and 6 train 3 3 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via  It instruction/certification for one of two teaching  OF SCIENCE TECHNOLOGY IN THE TECHNOLO
After accumulating 21 hours in Art, Junior Review Committee.  Consult catalog for requirements for fields.  ASSEMBLY SUPPLY SUPP	Plan A—Art SSOCIATE OMOTIVE ggested Or FIRST Hours 6 3 5 1 18 SECONI and 6 train 3 3 3 3	Phone: (417) 624-8100 Ext 263  It make application to Art 490, Senior Exhibit via It instruction/certification for one of two teaching  OF SCIENCE MAJOR CODE 5306  TECHNOLOGY reder of Study  YEAR  2nd Semester  Course Hours Auto 122 Automotive Electrical Systems 6 Auto 124 Auto Fuels, Fuel Systems 8 Emission Control 6 Draf 110 Intro to Drafting 3 HPER 160 Personal Health 2  TO  YEAR  Auto 240 Diesel Engines 5 Auto 262 Service Management 5 Fine Arts Elective 3 Hist 110 U.S. History 1492-1877 OR PSc 120 [U.S., State 8 Local Government] 3  For Additional Information Contact:

# BACHELOR OF SCIENCE

MAJOR CODE 0401

2nd Semester

## BIOLOGY Suggested Order of Study

FR	ESH	MA	N
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ist Semester		Ziid Jeiliestei	
Course	Hours	Course	Hours
Bio 101 General Biology	4	Bio 122 Zoology Survey (Bio 101)	3
Eng 101 Composition	3	[Math 140 College Algebra &	
HPER 101 Intro to P.E.	2	Trigonometry]	5
+ Gen Ed [Comm, Soc Science,		Eng 102 Composition	3
Humanities, Fine Arts]	6	Gen Ed [Comm, Soc Science, Human	ities,
Psy 120 Freshman Orientation	1	Fine Arts, Econ]	6
	16		17
	SOPHO	OMORE	
Bio 112 Botany Survey (Bio 101	3	Bio 305 Genetics (Bio 101, 211, or 2	31) 5
Bio 211 Microbiology (Bio 101) OR	*Bio	Bio 210 General Physics (Bio 101,	
231 (Med Micro, Chem 101 & Bi		112, 122)	4
Chem 101 General Chemistry (Mat		Gen Ed [Comm, Soc Science,	
Gen Ed [Comm, Soc Sci, Humanitie		Humanities, PE, Econ]	2-3
Econl	2-3		11-12
-			

\*Offered Fall Semester ( ) Prerequisite

[ ] Dept Recommendations

#### DEPARTMENTAL REQUIREMENTS Must take one course from each Bio Group

14-15

Α	В		C	
One 3 or 4 Hour	One 4 or 5 Hour		One 4 Hour Upper	
Upper Division	Upper Division		Division Environ-	
Botany course	Zoology	course	mental Bio course	
Required Biology Courses		Supporting Co.	urses in Science & Mathematics	
Bio 101	4	Required		
Bio 112	3	Math 140		
Bio 122	3	Phys 151		
Bio 210	4	Chem 101		
Bio 211 or 321	5	Chem 102		
Bio 305	4	Chem 300 or :	301	
Bio 490	1			
Bio A				
Bio B				
Bio C				
	Total 40			

			(417) 624-8100
For Additional Information Contact:	Name	Location	Ext
Botany	Dr. E. Sam Gibson	S-308D	278
Fish & Wildlife	Dr. O. E. Orr	S-308B	278
Forestry, Ecology, Entomology	Dr. Jim Jackson	S-308A	278
Ocean & Marine	Mr. Wayne Stebbins	S-308E	278
Genetics, Microbiology	Dr. William Ferron	S-216	239

# BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0840 BIOLOGY MAJOR

#### Option B-Single Teaching Field Suggested Order of Study

#### FRESHMAN

	FRESH	IMAN	
1st Semester		2nd Semester	
Course	lours	Course	Hours
Bio 101 General Biology	4	Bio 102 Zoology Survey (Bio 101)	3
Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Psychology of Human		Math 140 Algebra & Trig	5
Development	5	Gen Ed [Comm, Hist, PSc,	
Psy 120 Freshman Orientation Gen Ed [Comm, Hist, PSc,	1	Humanities, Fine Arts]	3 14
Humanities]	3		
	16		
	SOPHO	OMORE	
Bio 112 Botany Survey (Bio 101)	3	Bio 211 Microbiology (Bio 101,	
Chem 101 General Chemistry I (Math 1:	30	Chem 101)	5
or Math 140	5	Bio 305 Genetics (Bio 101)	4
Phys or Geology	5	Chem 102 General Chemistry (Chem	101) 5
Gen Ed [Comm, Hist, PSc,		Gen Ed [Comm, Hist, PSc, Humanitie	s, Fine
Humanities, Fine Arts, PE]	3	Arts, PE]	3
	16		17
	JUN	IOR	
Chem 301 Organic Chemistry (Chem 10	02) 5	**Bio 402 General Ecology (Bio 101, 1	12,
Ed 300 Clinical Experience	2	322 or Consent)	4
Ed 330 Structures Teaching/Sec	2	Psy 302 Exceptional Child (Psy 110)	2
Ed 331 Microteaching/Secondary	2	Psy 310 Educational Psych	2
Ed 370 Instructional Media	2	Biology Electives	5
Gen Ed [Comm, Hist, PSc,		Gen Ed [Comm, Hist, Arts, PSc,	
Humanities, Fine Arts, PE]	3	Humanities, Fine Arts, PE]	3
	16		16
	SEN	IOR	
Bio 306 Human Physiology &		Professional Semester - to include	
Anatomy (Bio 122)	5	Ed 422	18
Econ 180 American Economic System	3		18
Biology Electives	5		
Elective	3		
	16		
**Offered Spring Semester Only			
( ) Prerequisite		For Additional Information Contact:	
[ ] Dept Recommendation-not necessar	ily	Dr. William L. Ferron	
in this order		Office: Science-Math Bldg., 216	

Phone: (417) 624-8100 Ext 239

# BACHELOR OF SCIENCE BUSINESS EDUCATION

MAJOR CODE 0838

#### Plan B-Single Teaching Field Suggested Order of Study

#### FRESHMAN

	FRESH	HMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Hist 110 U.S. History	3	PSc 20 Government: National, State,	
Gen Ed [Fine Arts]	3	& Local	3
Psy 110 Psychology of Human		Gen Ed [Humanities or Fine Arts]	3
Development	5	Math 131 Finite Math	3
HPER 101 Intro to P.E.	2	Psy 302 Exceptional Child (psy 110)	2
Psy 120 Freshman Orientation	1	Elective [Comp 100, GB 115,	-
13y 120 Heshinan Chematon	17	OA 230]	3
	17		17
	SOPHO	OMORE	
Econ 201 Principles of Economics	SOFIIC	Econ 202 Principles of Economics	3
·	3		3
(Math 131)	3	Acct 202 Principles of Accounting II	2
Acct 201 Principles of Accounting I	2	(Math 131)	3
(Math 131)	3	GB 320 Business Communications	3
Gen Ed [Bio 101]	4	Gen Ed Phys 100	5
Gen Ed [Humanities or Fine Arts]	3	Comm 103 Business and	
HPER 160 Personal Health	3	Professional Speech	3
Ed 300 Clinical Experience	2		17
	16		
		IOR	
Acct 312 Intermediate Accounting I		[GB 302 Business Law II]	3
310 Cost Accounting OR Acct 40°	1 Tax	OA 200 Typewriting III	3
Accounting OR Acct 498 Seminar	in	OA 220 Dictation & Transcription	3
Managerial Acct	3	Psy 310 Educational Psychology	2
GB 301 Business Law I	3	OA 250 Intro to Word Processing	3
OA 120 Intermediate Shorthand	3	OA 250 Intro to Word Processing	3
MM 350 Principles of Management MM 300 Principles of Marketing	OR	Educ 422 Reading in Secondary School	16
(Econ 202)	3		
OA 102 Typewriting II	3		
	15		
	SEN	IOR	
OA 231 Secretarial Machines	3	Professional Semester	16
Electives Business & Computer			
Courses-300 or above	6		
ED 330 Structure of Teaching	2		
Ed 331 Microteaching	2		
Psy 302 Exceptional Child	2		
Ed 370 Instructional Media	2		
	17		
( ) Proroquisitos			
( ) Prerequisites [ ] Dept Recommendation		For Additional Information Contact:	
1 J Dept Recommendation		Dr. Cecil Ratliff	
		Office: 317 Matthews Hall	
		Phone: (417) 624-8100 Ext. 349	

Students with proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses in order to meet the 42 hours requirement.

Plan A-Bus Ed as one of two teaching fields requires the following 30 credit hours: Acct 201, 202, 312, OR 310, OR 401, Econ 202, 202, Office Ad Typing 6 hrs.; Shorthand 6 hrs.; Upper Division Elective in Business, 3 hours.

# BACHELOR OF ARTS DEGREE CHEMISTRY MAJOR

MAJOR CODE 1905

# Suggested Order of Study FRESHMAN

1st Semester		2nd Semester	
Course	lours	Course	Hours
Chem 101 General Chemistry I (Algebra	&	Chem 102 General Chemistry II	
Trigonometry)	5	(Chem 101)	5
Math 140 Algebra & Trigonometry OR		Eng 102 Composition	3
(Math 150 Calculus I)	5	Gen Ed [HPER 101 Physical Activities	
Eng 101 Composition	3	or equivalent]	2
Psy 120 Frehsman Orientation	1	Electives (Second area of	_
	14	concentration)	6
	1-4		16
	SOPHO	OMORE	
*Chem 301 Organic Chemistry I OR Che		*Chem 302 Organic Chemistry II OR	
201 Analytical Chemistry I	5	Chem 300 Intro to Modern Organic	
	5		E
Phys 151 Elementary College Physics I	5	Chemistry	5
Gen Ed [HPER 160 Personal Health or		Phys 152 Elementary College Physics II	-
equivalent]	2	(Phys 151)	5
Electives (Second area of		Gen Ed [PSc 120 Government: National,	
concentration)	5	State & Local]	3
	17	Electives (Second area of	
		concentration)	5
			18
	IIIN	IOR	
Chem 201 Analytical Chemistry I	5	Chem Elective (Upper Division)	4
(Chem Elective Upper Division)	(4)	Foreign Language	5
Foreign Language	5	Gen Ed [Behavioral & Social Science]	3
Gen Ed [Oral Communications]	3	Gen Ed [Bio 101 General Biology]	4
Gen Ed [Literature]	3	Gen tu [Bio 101 General Biology]	
_			16
	5-16		
		IOR	
Gen Ed [Humanities & Fine Arts]	3	Gen Ed [Humanities & Fine Arts]	3
Econ 180 American Economic System	3	Electives	12
Electives	10		15
	16		
or Chem 301 and Chem 302. Plus 3 hou		of upper division Chemistry (excluding Chem per division Chemistry electives.	301)
( ) Prerequisites			
[ ] Dept Recommendation		For Additional Information Contact:	
		Dr. Phillip R. Whittle	
		Office: S-222 or PA-C	
		Phone: (417) 624-8100 Ext 241/211	
		OR	
		Dr. Vernon Baiamonte	
		Office: S-218	
		Phone: (417) 624-8100 Ext 241	
		Thomas (TTT) our of the ETT	

### BACHELOR OF SCIENCE CHEMISTRY MAJOR Suggested Order of Study

MAJOR CODE 1905

#### FRESHMAN

1st Semester		2nd Semester	
Course H	ours	Course Ho	ours
Chem 101 General Chemistry I (Algebra		Chem 102 General Chemistry II	
& Trigonometry)	5	(Chem 101)	5
Math 150 Calculus I	5	Math 250 Calculus II (Math 150)	5
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
HPER 101 Physical Activities	2	Phys 201 General Physics I (Math 150)	3
Psy 120 Freshman Orientation	1	, , , , , , , , , , , , , , , , , , , ,	17
,	16		
	SOPH	OMORE	
Chem 301 Organic Chemistry I		Chem 302 Organic Chemsitry II	
(Chem 102)	5	(Chem 301)	5
Phys 250 General Physics II (Phys 201)	3	Phys 203 General Physics II (Phys 202)	4
**Math 260 Calculus III (Math 250)	5	**Math 322 Differential Equations	
Gen Ed [Hist 110 or 120 U.S. History]	3	(Math 260)	3
HPER 160 Personal Health	2	Gen Ed [PSc 120 Government: National,	
_	18	State & Local]	3
	10		15
	HIN	NIOR	
Character 1 On	JUN		
Chem 401 Physical Chemistry I OR		Chem 402 Physical Chemistry OR	
**Chem 422 Advanced Inorganic	4	**Chem 472 Organic Qualitative	
Chemistry	4	Analysis	4
Chem 201 Analytical Chemistry I	5	**Chem 421 Analytical Chemistry II	5
Gen Ed [Communications]	3	Gen Ed [Humanities & Fine Arts]	3
Gen Ed [Behavioral & Social Sciences]	3	Gen Ed [Bio 101 Gen Biology]	4
Gen Ed [Literature]	3		16
	18		
	SEN	NIOR	
Chem 401 Physical Chemistry I OR		**Chem 402 Physical Chemistry OR	
**Chem 422 Advanced Inorganic		**Chem 472 Organic Qualitative	
Chemistry	4	Analysis	4
**Chem 490 Independent Study	1	**Chem 490 Independent Study	2
Gen Ed [Humanities & Lit]	3	**Phys 372 Electronic Circuits	4
Gen Ed [Econ 180 American Economic		Elective (Upper Division)	5
System]	3		16
Electives (Upper Division)	4		
	15		
**Suggested elective (not strict requirement	ents)		
( ) Prerequisites		F Aller III C C	
Dept Recommendations		For Additional Information Contact:	
1 1 = apriliate of the control of th		Dr. Vernon Baiamonte	
		Office: S-218	
		Phone: (417) 624-8100 Ext 241	

# BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0841 CHEMISTRY MAJOR

## Suggested Order of Study

#### FRESHMAN

	INLO	11467214	
1st Semester		2nd Semester	
Course	ours	Course Ho	urs
Chem 101 General Chemistry I (Algebra		Chem 102 General Chemistry II	
& Trigonometry	5	(Chem 101)	5
Math 150 Calculus I	5	Math 250 Calculus II (Math 150)	5
HPER 101 Physical Activities	2	Eng 102 Composition	3
Eng 101 Composition	3	Phys 201 General Physics I	
Psy 120 Freshman Orientation	1	(Math 150)	4
	16		17
	SOPHO		
*Chem 301 Organic Chemistry		**Chem 302 Organic Chemistry II	
(Chem 102)	5	(Chem 301)	5
Phys 202 General Physics II (Phys 201)	3	Phys 203 General Physics III (Phys 202)	4
+ Math 260 Calculus III (Math 250)	5	Ed 302 The Exceptional Child	2
Psy 110 Psychology of Human Growth		HPER 160 Personal Health	2
and Development	5	PSc 120 Government: National, State,	
	18	Local	_3
			16
	JUN	IOR	
Chem 401 Physical Chemistry I OR Cher	m	Chem 499 Problems Laboratory	2
422 Advanced Inorganic Chemistry	4	Ed 300 Clinical Experience	2
Chem 201 Analytical Chemistry	5	Ed 330 Structures of Teaching/Secondary	2
Gen Ed [Communications]	3	Ed 331 Microteaching	2
Psy 310 Educational Psychology (Psy 110	0) 2	Ed 370 Introduction to Instructional Media	2
Hist 110 or 120 U.S. History	3	Gen Ed [Literature]	3
	17	Gen Ed [Humanities & Fine Arts]	3
			16
	SENI		
Chem 401 Physical Chemistry I OR +		Ed 333 Teaching Science in Secondary	
Chem 422 Advanced Inorganic		Schools	2
Chemistry	4	Ed 402 Foundations of Education	2
Gen Ed [Humanities & Fine Arts]	3	Ed 432 Critical Issues	2
Gen Ed [Econ 180 American Economic		Ed 422 Reading in the Secondary School	2
System]	3	Ed 462 Student Teaching Secondary	8
Electives (Upper Division)	6	Required Elective [Ed 412, 420, 423	
	16	or Psy 412]	_2
			18
+ Suggested elective (not strict requireme	ents)		
*Offered Fall Semester Only		For Additional Information Contact:	
**Offered Spring Semester Only		Dr. Vernon Baiamonte	
( ) Prerequisites		Office: S-218	
[ ] Dept Recommendations		Phone: (417) 624-8100 Ext. 241	

# BACHELOR OF ARTS PUBLIC COMMUNICATIONS BROADCAST EMPHASIS Suggested Order of Study

MAJOR CODE 0600

#### FRESHMAN

1st Semester		2nd Semester	
Course	Hours	Course	lours
Comm 101 Intro to Human		Comm 120 Mass Communications Theo	ry 3
Communications	3	Eng 102 Composition	3
Comm 100 Oral Communication	3	Math 110 Intro to College Math	3
Comm 111 Newswriting	3	Bio 101 General Biology	4
HPER 101 P.E. Activity	2	Comm 130 Introduction to	
Psy 120 Freshman Orientation	1	Broadcasting	3
Eng 101 Composition	3		16
	15		
	SOPHO	OMORE	
Comm 215 Interpersonal Communicat	ion 3	Comm 201 Television Workshop	4
Comm 200 Radio Workshop	4	Foreign Language	5
Foreign Language	5	Econ 180 American Economic System	3
PSc 120 U.S. National, State, & Local		Gen Ed (Fine Art)	3
Government	3	Comm 301 Broadcast, Cable	
HPER 160 Personal Health	2	Management	3
	17		18
	IUN	IIOR	
Comm 325 Broadcast News Rept.	3	Comm 220 Practical Journalism	1
Foreign Language	3	Comm 310 Communications Law	3
Phys 100 Fundamentals of Physical		**Supporting Electives (Upper Division)	6
Science	5	Psy 100 or Sociology 110	3
Gen Ed (Literature) (Upper Division)	3	Hist 110 or 120 U.S. History	3
Comm 233 Newspaper Editing	3		16
	17		

#### SUMMER: Comm 345 Internship 8

#### **SENIOR**

**Supporting Electives (Upper Division)	9
Electives or Minor (Upper Division)	5
Gen Ed (Literature) (Upper Division)	3
	17

<sup>\*\*</sup>Supporting electives selected from **upper division** History, Business, Political Science, Sociology, or Psychology.

For Additional Information Contact: Mr. Richard Massa Office: 117 Hearnes Hall Phone: (417) 624-8100, Ext. 228 Toll Free in MO: 1-800-492-4811

<sup>( )</sup> Department Recommendation

# BACHELOR OF ARTS PUBLIC COMMUNICATION

MAJOR CODE 0600

#### PUBLIC COMMUNICATIONS NEWSPAPER EMPHASIS Suggested Order of Study

#### **FRESHMAN**

1st Semester		2nd Semester	
Course	Hours	Course Hor	urs
Comm 101 Intro to Human		Comm 120 Mass Communications Theory	3
Communications	3	Eng 102 Composition	3
Comm 100 Oral Communications	3	Math 110 Introduction to College Math	3
Eng 101 Composition	3	Bio 101 General Biology	4
Comm 111 Newswriting	3	Communications Elective	3
HPER 101 P.E. Activity	2	Comm 20 Practical Journalism	1
Psy 120 Freshman Orientation	1		17
	15		
	SOPH	OMORE	
Comm 215 Interpersonal Communication	tion 3	Comm 130 Introduction to Broadcasting	3
Comm 233 Newspaper Editing	3	Foreign Language	5
Foreign Language	5	Econ 180 American Economic System	3
PSc 120 U.S. National, State, & Local		Gen Ed (Fine Arts)	3
Government	3	**Supporting elective (Upper Division)	3
HPER 160 Personal Health	2		17
	16		
	JUN	NOR	
Comm 302 Photocommunications	3	Comm 201 Television Workshop	4
Foreign Language	3	Comm 310 Communications Law	3
Phys 100 Fundamentals of Physical		Psy 100 or Sociology 110	3
Science	5	Hist 110 or 120 U.S. History	3
Gen Ed (Literature) (Upper Division)	3	**Supporting Elective (Upper Division)	3
Comm 200 Radio Workshop	4		16
	10		

SUMMER: Comm 345 Internship 8

#### **SENIOR**

**Supporting Electives (Upper Division)	9
Electives or Minor (Upper Division)	5
Gen Ed (Literature) (Upper Division)	3
	17

\*\*Supporting electives selected from **upper division** History, Business, Political Science, Sociology, or Psychology (3 hours).

( ) Department Recommendation

For Additional Information Contact: Mr. Richard Massa Office: 117 Hearnes Hall Phone: (417) 624-8100, Ext. 228 Toll Free in MO: 1-800-492-4811

#### BACHELOR OF ARTS SPEECH COMMUNICATIONS Suggested Order of Study

MAJOR CODE 0600

#### FRESHMAN

1st Semester		2nd Semester	
Course Hor	urs	Course H	ours
Comm 100 Oral Communication	3	Comm 120 Mass Communication Theory	3
Communications	3	Eng 102 Composition	3
Comm 121 Forensics Workshop	1	HPER 101 P.E. Activity	2
Eng 101 Composition	3	PSc 120 U.S. National, State, Local	_
Econ 180 American Economic System	3	Government	3
Psy 120 Freshman Orientation	1		14
-	14		1-7
5	ОРНОМ	ORE	
Comm 215 Interpersonal Communication	3	Comm 212 Oral Interpretation	3
Comm 213 Argument & Debate	3	Foreign Language	5
Foreign Language	5	Bio 101 General Biology	4
Phys 100 Fundamentals of Physical		Psy 100 or Sociology 110	3
Science	5	HPER 160 Personal Health	2
	16		17
	JUNIO	R	
Comm 210 Small Group Comm	3	Communication Electives	6
Comm 300 Organization Comm	3	Math 110 Intro to College Math	3
Comm 321 Forensics Workshop	1	Gen Ed (Literature or Fine Art)	3
Upper Division Elective	3	Hist 110 or 120 U.S. History	3
Foreign Language	3		15
	13		
	SENIO		
Gen Ed (Literature)	3	Comm 493 International Comm	3
CommunicationElectives (Upper Division)		Electives or minor	12
Electives (Upper Division	6		15
	15		
( ) Department Recommendation			
		For Additional Information Contact: Mr. Richard Massa Office: Hearnes Hall Phone: (417) 624-8100 Ext. 228 Toll Free in MO: 1-800-492-4811	
4550	CIATE OF	SCIENCE MAIOR CODE 51	04

#### ASSOCIATE OF SCIENCE COMPUTING ANALYSIS Suggested Order of Study

MAJOR CODE 5104

## FIRST YEAR

	FIRS	T YEAR	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Comp 120 Introduction to Programming	3	**Computer Elective	3
*Math 150 Calculus & Analytical		Comp 240	3
Geometry I	5	Math 250 Calculus & Analytical	
Gen Ed [Eng 101 English Composition]	3	Geometry II	5
Phys 201 General Physics I (Math 150		Phys 202 General Physics II	3
co-requisite)	4	Gen Ed HPER 101 or 160	2
Gen Ed [PSc 120 Government National,			16
State, Local]	3		
Psy 120 Freshman Orientation	1		

SECO	ND YEAR
Comp 250 Principles of Digital	Comp 220 Analog Methods & Simulation
Computing Machines 3	Techniques 3
Math 260 Calculus & Analytical	Math 322 Differential Equations 3
Geometry III 5	[Math 431 Numerical Analysis or 350] 3
Phys 203 General Physics III 4	Math 361 Intro to Probability 3
Phys 312 Statics 3	Gen Ed [Comm 103 Business &
Gen Ed [Psy 100 General Psychology]3	Professional Speech] 3
18	Gen Ed Literature or Fine Arts3
	18
*Satisfies a General Education Requirement	
( ) Prerequisites	For Additional Information Contact:
[ ] Dept Recommendations	Dr. John M. Cragin
	Computer & Information Science
	Phone: (417) 624-8100 Ext 224
**SELECT FROM AMONG THE FOLLOWING:	
Comp 130 Elementary Programming (Basic)	
Comp 230 Advanced Programming (RPG II)	
Comp 234 Business Data Processing	
(COBOL)	
ASSOCIATI	E OF SCIENCE MAJOR CODE 5103
	PROGRAMMING
Suggested (	Order of Study
FIRS	T YEAR
1st Semester	2nd Semester
Course Hours	Course Hours
Comp 100 Introduction to Data Processing 3	Comp 120 Intro to Programming
Gen Ed [Lit or Fine Art] 3	(Math 131) 3
*[Math 131 Finite Math] or 130 Algebra 3	Acct 201 Principles of Accounting I
Gen Ed [Eng 101] or higher 3	(Math 131) 3
Gen Ed [PSc 120 Government] 3	Gen Ed. [Comm 103 Business &
Psy 120 Freshman Orientation1	Professional Speech] 3
16	Elective [GB 320 Business
	Communications] 3
	Gen Ed [Phys 100 Physical Science] or
	Bio 101 <u>4-5</u>
	16-17
	ND YEAR
**Computer Elective 3	Comp 250 Principles of Digital
Comp 240 Statistical Computer	Computing Machines 3
Applications 3	Comp 300 Systems Analysis/Design 3
Acct 202 Principles of Accounting II	Econ 201 Principles of Economics-Macro 3
(Acct 201) 3	[Acct 310 Cost Accounting] or Acct 312 3
*Econ 202 Principles of Economics-Micro 3	Gen Ed [Psy 100 General Psychology] 3
GB 321 Business Statistics (Math 131) 3	Gen Ed Lit or Fine Art
Gen Ed HPER 101 or 1602	18
17	
* Satifies a General Education Requirement	
( ) Prerequisites	5 A 1 12: 11 (
Dept Recommendation	For Additional Information Contact:
[ ] Dept Recommendation	Mr. Willis Calicott
	Computer & Information Science
	Phone: (417) 624-8100 Ext 224
**SELECT FROM AMONG THE FOLLOWING:	
Comp 110 Keypunch/Data Entry	
Comp 230 Advanced Programming (RPGII)	
Comp 234 Business Date Processing	
Tochniques (COROL)	

Techniques (COBOL)

Comp 130 Elementary Programming (BASIC)

#### **BACHELOR OF SCIENCE**

**MAJOR CODE 2105** 

# CRIMINAL JUSTICE ADMINISTRATION Suggested Order of Study

#### **FRESHMAN**

1st Semester		2nd Semester	
Course	Hours	Course Hou	urs
LE 100 Intro to Law Enforcement	3	LE 150 Interview & Report Writing	2
LE 110 Police Organization &		Eng 102 Composition	3
Administration	2	Math 110 Intro College Math	3
Eng 101 Composition	3	Bio 101 General Biology	4
Econ 180 American Economic System	3	PSc 120 U.S., State, & Local Government	3
Comm 100 Oral Communications	3	HPER 101 P.E. Activity	2
Psy 120 Freshman Orientation	1	·	17
	15		
	SOPHO	OMORE	
LE 210 Criminal Procedures	3	LE 250 Criminal Law	3
Hist 110 or 120 U.S. History	3	LE 290 Police Supervision & Management	3
Phys 100 Fundamentals of Physical		Soc 210 Social Problems	3
Science	5	Psy 100 General Psychology	3
Soc 110 Intro to Sociology	3	Gen Ed [Literature]	3
HPER 160 Personal Health	2		15
	16		
	JUN	IIOR	
CJAd Elective	3	CJAd Elective	3
*Gen Ed [Phys 100]	5	*Gen Ed [Fine Art]	3
Soc 351 Criminology	3	Soc Elective	3
Psychology Elective	3	Electives	4
Elective	1	Psychology Elective	3
	15		16
		IOR	
CJAd Elective	3	CJAd 490 Internship in CJAd	6
CJAd Elective	2	PSc Elective (Upper Division)	3
*Gen Ed [Literature or Fine Art]	3	CJAd Elective	5
Psychology Elective	3	Electives	2
All electives must be approved by a CJ	14 Ad		16
advisor prior to enrollment.  [ ] Dept Recommendation		For Additional Information Contact: Mr. Don Seneker Office: Police Academy, Room 104 Phone: (417) 624-8100 Ext. 219	

# DENTAL ASSISTING CERTIFICATE

MAJOR CODE 5202

#### One-Year Schedule Required Order of Study

Students must apply for admission and be accepted into the Dental Assisting Program before they may enroll in DA 100, 150, 180, and 190. Applications for the Dental Assisting Program may be obtained from the Dental Technology Office in the Technology Building.

1st Semester		2nd Semester	
Course	Hours	Course	Hours
DA 100 Dental Science I	3	DA 150 Dental Science II	3
DA 120 Dental Lab Procedures I	3	DA 160 Dental Lab Procedures II	3
DA 130 Dental Orientation	2	DA 170 Dental Secretarial Procedure	3
DA 140 Dental Operative Procedure	5	DA 180 Dental Specialities	3
DA 160 Dental Radiology	2	DA 190 Cline al Dental Assistant	5
Eng 101 Composition	3	Psy 100 General Psychology	3
	18		20
		Total Accumulated hours	38

For Additional Information Contact: Mrs. Mary Ensminger Office: 102 Technology

Phone: (417) 624-8100 Ext 279

# DATA PROCESSING CERTIFICATE Suggested Order of Study MAJOR CODE 5100

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Comp 120 Intro to Programming	3	Computer Elective	3
Eng 101	3	Computer Elective	3
Math 131 or 130 or higher	3	Approved Elective	3
Approved Elective	3	Elective from Assoc. Sci. General	
Free Elective	3	Education	3
	15	Free Elective	3
			15

#### Computer Electives

Comp 110 Keypunch/Data Entry

Comp 130 Elementary Programing (BASIC)

Comp 230 Advanced Programming (RPG II)

Comp 234 Business Data Processing

Techniques (COBOL)
Comp 240 Statistical Computer Applications

For Additional Information Contact:

Mr. Jim Gray

Computer & Information Science

Phone: (417) 624-8100 Ext. 351

# ASSOCIATE OF SCIENCE DENTAL HYGIENE

MAJOR CODE 5203

Suggested Order of Study

Students must apply for admission and be accepted into the Dental Hygiene Program before they may enroll in DH 140, DH 150, 160, 200, 210, 220, 290, 310, 330, 390, 100, 190, and 320. Applications for the DENTAL HYGIENE PROGRAM may be obtained from the Dental Hygiene office

in the Technology Building.

PREREQUISITES.	
*Bio 121 General Zoology	4
Eng 101 Composition	3
Math 30 Intermediate Algebra	
or above or College Math	3

#### FIRST YEAR

FALL SESSION		SPRING SESSION	
DH 101 Fundamentals of Dental		DH 102 Fundamentals of Dental	
Hygiene I	3	Hygiene II	3
DH 140 Dental Morphology	1	DH 150 Oral Histology & Embryology	3
*Bio 221 Human Physiology & Anatomy	5	DH 160 Dental Radiology	2
Chem 100 General Chemistry	5	DH 220 Dental Materials	3
Gen Ed (Fine Art or Lit)	3	DH 310 Nutrition	2
	17	Bio 231 Medical Microbiology	5
			18

#### SUMMER SESSION

DH 190 Clinical Dental Hygiene I	3
DH 210 Perio-pathology	3
	6

	SECON	D YEAR	
FALL SESSION		SPRING SESSION	
DH 200 Dental Health Education	3	DH 330 Ethics & Community Dentistry	3
DH 290 Clinical Dental Hygiene II	5	DH 390 Clinical Dental Hygiene III	5
DH 320 Pharmacology	2	Soc 110 Intro to Sociology	3
Psy 110 Psychology of Human		Gen Ed (Hist 110 or PSc 120)	3
Development	5	HPER 101 Intro to P.E.	2
Comm 100 Oral Communications	3		16
	18		
Total ac	cumulated h	ours: 77 credit hours	
Dental Courses i	must be earne	ed in the prescribed sequence.	
		·	

\*Placement in Bio 221 will depend on preentrance zoology test scores or completion of Bio 121.

For Additional Information Contact: Mrs. Mary Ensminger Office: 102 Technology Phone: (417) 624-8100 Ext. 279

Phone: (417) 624-8100 Ext. 279

**MAJOR CODE 5303** 

# ASSOCIATE OF SCIENCE DRAFTING AND DESIGN MAJOR Suggested Order of Study

	FIRST	YEAR
1st Semester		2nd Semester
Course Ho	urs	Course Hours
Draf 110 Intro Drafting	3	Draf 120 Descriptive Geometry (Draf 110) 3
Math 30 Intermediate Algebra OR		Draf 130 Machine Drafting (Draf 110) 3
Math 130 College Algebra	3	Math 112 Trigonometry 3
Mach 100 or Wood 300	4-5	Eng 101 Composition 3
Gen Ed [Literature of Fine Art]	3	Comm 100 or 131 3
HPER 101 Intro to P.E.	2	15
Psy 120 Freshman Orientation	1	
16	-17	
S	ECONI	D YEAR
Draf 202 Tool Design OR Draf 204 Me-		Draf 210 Production Illustration (Draf 110) 3
chanical Design (Draf 110 & Draf 130)	3	Draf 220 Architectural Drafting (Draf 110) 3
Draf 250 Mapping & Surveying (Draf 110	) 3	Gen Ed [Psy 100 or Soc 110] 3
Comp 120 Intro to Programming OR		Gen Ed [PSc 120 or Hist 110] 3
Comp 130 Elementary Programming	3	Technical Elective 3
Gen Ed [Phys 100]	5	15
Technical Elective	3	
	17	
( ) Prerequisite		
Dept Recommendation		For Additional Information Contact
1 1 - op. riccommendation		For Additional Information Contact:
		Mr. Ronald J. Morgan
		Office: 115 Technical Building Annex

6 hours of technical electives should be selected from: Mach 100 Intro to Machine Tool Processes (5) Wood 300 Woodworking and Wood (4) Draf 202 Tool Design (3)

Draf 204 Mechanical Design (3) Draf 298 Special Topic (3)

MAJOR CODE 0517

**MAJOR CODE 5101** 

#### BACHELOR OF SCIENCE BUSINESS ADMINISTRATION ECONOMICS AND FINANCE MAJOR Suggested Order of Study

#### FRESHMAN

	LKESI	IMAIN	
1st Semester		2nd Semester	
Course Ho	urs	Course	Hours
Math 131 Finite Math	3	Eng 102 Composition (Eng 101)	3
Eng 101 Composition	3	Hist 110 or 120 U.S. History	3
PSc 120 U.S., State, & Local Government	3	Gen Ed [Comm 100 Oral Comm]	3
[Computer Science Elective	3	Gen Ed [Fine Arts]	3
[GB 115 Business Math/Calculators]		Gen Ed [Fine Arts]	3
Psy 120 Freshman Orientation	1	HPER 101 Intro to P.E.	2
	16		17
	SOPHO	OMORE	
Acct 201 Principles of Accounting I		Acct 202 Principles of Accounting II	3
(Math 131)	3	Econ 202 Principles of Economics	3
Econ 201 Principles of Economics	3	Gen Ed [Phys 100 or equiv]	5
Gen Ed [Bio 100 or equiv]	4	GB 320 Business Communications	3
Gen Ed [Humanities: Literature]	3	Elective	3
HPER 160 Personal Health or Physical			17
Activities	2		.,
15	-16		
	JUN	IOR	
Econ 300 Money & Banking (Econ 201 &	•	Econ 350 Financial Mangement	3
202)	3	Economics Elective	3
GB 301 Business Law I	3	GB 337 Managerial Data Processing	3
GB 321 Business Statistics (Math 131)	3	Required Business Elective Choose	
MM 300 Principles of Marketing		GB 302, GB 322, MM 441	3
(Econ 202)	3	Economics Electives	3
MM 350 Principles of Management	3		15
	15		13
	SEN	IOR	
Econ 401 Microeconomic Analysis	3	MM 452 Business Policy	3
Econ 411 Investments	3	Econ 402 Macroecon Analysis	3
Economics Elective	3	Economics Elective	3
Electives	9	Electives	6
_	18		15
( ) Prerequisites			
[ ] Dept Recommendations		For Additional Information Contact:	
		Dean of School of Business	
		Office: 117 Business School Bldg.	
		Phone: (417) 624-8100 Ext. 319	

#### ASSOCIATE OF SCIENCE ELECTRONIC DATA PROCESSING Suggested Order of Study

#### FIRST SEMESTER

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Comp 100 Intro to Data Processing	3	Comp 120 Intro to Programming	
Ged Ed [PSc 120]	3	(Math 131)	3
Gen Ed [Eng 101]	3	Comp 110 Key Punch/Data Entry	3
*[Math 131] or 130 or higher	3	OA 250 Word Processing	3
Approved Elective [GB, MM, OA]	3	*Econ 202 Micro Economics	3
Psy 120 Freshman Orientation	1	HPER 101 or 160	2
	16	Acct 201 Principles of Acct I	3
			17

Comp 234 Business Data Processing (COBOL)

Comp 302 Systems Concepts and

Implications

	SECOND SE	MESTER
**Computer Elective	3	Computer Elective
GB 321 Business Statistics	3	Gen Ed [Comm 103 Business and
Gen Ed [Psy 100]	3	Professional Speech]
Gen Ed [Literature or Fine Art]	3	Gen Ed [Phys 100 or Bio 101
Acct 202 Principles of Acct II	3	Approved Elective [GB, MM, OA]
	15	
*Satisfies a General Ed requirement		
( ) Prerequisites		For Additional Information Contact:
[ ] Dept Recommendations		Mr. lim Grav
		Computer & Information Science
		Phone: (417) 624-8100 Ext. 351
** Select from among the following		
Comp 300 Systems Analysis/D	esign	
OA 102 Typewriting II		
OA 111 Elementary Shorthand		
OA 200 Typewriting III		
OA 230 Secretarial Procedures		
OA 231 Secretarial Machines		
GB 320 Business Communicati		
GB 301/302 Business Law I/Bu		
GB 337 Managerial Data Proce		
MM 300 Principles of Marketin	0	
MM 350 Principles of Manager		
MM 352 Personnel Manageme	nt	
Computer Electives		
Comp 130 Elementary Program		
Comp 230 Advanced Programm		

3 4-5 6 16-17

#### BACHELOR OF SCIENCE IN EDUCATION ELEMENTARY EDUCATION Suggested Order of Study

#### FRESHMAN

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Psy 110 Psychology of Human	110013	Math 120 Mathematics for Elementary	
Development	5	Teachers II (Math 111)	3
Eng 101 Composition	3	Eng 102 Composition	3
Math 111 Mathematics for Elementary		Comm 100 or 131	3
Teachers I	3	Hist 110 or 120 U.S. History	3
Econ 180 American Economic System	3	Gen Ed [Literature]	3
Psy 120 Freshman Orientation	1	HPER 101 P.E. Activity	2
,	15		17
	SOPHO	OMORE	
Psy 302 Exceptional Child Psychology		Psy 310 Educational Psychology (Psy	110) 2
(Psy 110)	2	Soc 110 or 152	3
Bio 101 Intro to Biology	4	HPER 370 School Health Education	3
Mus 110 Music Appreciation	3	Phys 100 Fundamentals of	
Art 110 Intro to Art	3	Physical Science	5
PSc 120 U.S. National, State, & Local		Art 220 Art Education	3
Government	3		16
	15		

	JUN	IOR
Mus 322 Music for Elementary School	3	Eng 325 Children's Literature
HPER 311 P.E. for Elementary School	3	Ed 320 Structures
Geog 211 Regions & Nations	3	Ed 321 Microteaching
Ed 340 Language Arts	2	Ed 312 Problems of Teaching Arithmetic
Ed 342 Developmental Reading	3	Ed 343 Reading Instruction
_	14	Supporting Area
	14	Ed 300 Clinical Experiences
		1
	CEN	
Ed 311 Science in Elementary School	2 2	Professional Semester1
Ed 470 Diagonostic & Remedial Reading	2	1
	10-13	
	14-17	
( ) Prerequisite	17 17	
Department Recommendation		
[ ] Department Recommendation		For Additional Information Contact:
		Dr. Edward Merryman
		Office: 226 Taylor Hall
		Phone: (417) 624-8100 Ext. 308
AREA OF CONCENTRATION		
		REMENTS FOR SPECIAL EDUCATION
		GRADES 7, 8, 9, IS DESIRED ecial Ed. & Early Childhood)
ART MAJOR CODE 0861	. for spe	eciai Ed. & Early Childhood)
1. Design	6	
2. Painting and Drawing	6	
3. Elective Art Credit	7	5. Computer Science 120
4. Art Education (For Elem Sch)	2	6. Math 310 Elem Statistics/or Math 361
4. Alt Education (For Elem Sch)		Probability
ENGLISH MAJOR CODE 0842	21	,
1. Eng 101 Composition	2	SOCIAL STUDIES MANOR CODE 0007
	3	SOCIAL STUDIES MAJOR CODE 0867
2. Eng 102 Composition	3	1. Hist 100 Am History
3. Advanced Composition	3	2. Hist 120 Am History
4. Eng 301 Modern Grammar	3	3. Elective/Am History 2-
5. Eng 400 Hist of Eng Lang	3	4. PSc 120 Government
6. Eng 311 Am Literature	3	5. Econ 180 Am Econ System
7. Eng 312 Am Literature	3	<ol><li>Geog 211 Regions &amp; Nations</li></ol>
8. Eng 271 or 272 English Lit	3	7. Hist 130 West Civilization
9. Eng 411 Reading Secondary	2	Hist 140 West Civilization
	26	2
SPEECH AND THEATRE MAJOR CODE		<b>HEALTH &amp; PHYSICAL EDUCATION</b>
0844		MAJOR CODE 0868
Oral Communications	3	<ol> <li>Health Ed. First Aid, Anatomy &amp;</li> </ol>
2. Theatre Appreciation	3	Physiology, Kinesiology, etc.
3. Oral Interpretation	3	<ol><li>Fundamentals of P.E.</li></ol>
1. Interpersonal Comm	3	3. Survey of Sports or Coaching Courses 3-
5. Play Production	3	4. P.E. Elementary School
6. Creative Dramatics	3	5. Elective Courses in Rhythms and/or
7. Tech of Speech Correction	3	Games 3-
	21	2
SCIENCE MAJOR CODE 0863		**MUSIC (Instrumental & Vocal)
I. Chemistry	3-6	MAJOR CODE 0866
2. Physics	3-6	1. Theory ear, sight training and diction
3. Biology	3-6	2. Conducting
4. Geology or Physical Geology	3-6	3. Piano
5. Environmental Science	4	4. Voice
	21	5. Instruments (Not piano or organ)
MATHEMATICS MAJOR CODE 0865	21	6. Elective Music
	E	7. Mus. Elementary School (Mus 322)
I. Math 150 Calc/Analyt Geom	5	
2. Math 250 Calc/Analytic	5	2
3. Math 300 Fund Math Thot. (Math 260		**Areas also available in straight vocal or in
4. Math 332 Geometry	3	strumental music of 24 hrs. each

REMEDIAL READING TEACHER		2.	Select one Method 403 or 406;	404.
MAJOR CODE 0860			405	3
1. Ed 302 Exceptional Child		3.	Ed 407 Diag & Prescriptive Tch	3
2. Ed 340 Language Arts	2		Ed 420 Counseling	3
3. Ed 342 Intro to Dev. Rdg. or			Ed 430 Language Development	3
Ed 422 Rdg. Second. Sch	3		Ed 474 Ed-Psy Testing	3
4. Ed 343 Assessing & Personalyzing			Ed 496 Practicum	2
Reading	3		Psy 382 Intro to Behavior	
5. Ed 470 Diag. & Rem Reading	2		Modification	3
6. Psy 471/or 474 Educ Indiv Test	3	9.	Sociology (See General Studies)	Credit
7. Ed 471 Pract. in Diag. Read Diff.	3		Student Teaching Ed 442	
8. Ed 472 Pract. in Rem. of Reading				Total 23
	20			TOTAL ED
SPECIAL EDUCATION				
MAJOR CODE 0869				
Regular Elementary K-8 & Sp Ed K-12	2			
1. Ed 324 Intro	3			
EARLY	CHILDHO	OD ED	UCATION	
(Also: Early Childhood Special Education				uirements
above)				
Ed 316 Intro to Early Childhood	3			
Ed 319 Early Childhood Curr. & Mat	erials 3			
Psy 382 Behavior Modification	3			
Ed 420 Intro to Counseling	3			
HPER 370 Community Health &				
Nutrition	2-3			
Ed Language Dev. in Young Child	3			
Psy 300 Child Psy/or Human				
Development (Psy 110)	3			
Ed 498 Prescriptive Instruction	3			
HPER 340 Motor Learning	3			
	27			
Alexander The Charlest Teaching	Assissment set	must be	completed in Early Childhood	
Also required: The Student Teaching Preschool through Grade 3	8 hours	nust be	completed in Early Childhood.	
Freschool through Grade 3				
	BACHELO	R OF A	RTS MAJOR COD	DE 1501
	ENG	LISH		
Si	iggested O	rder of	Study	
36			Study	
	FRESH	HMAN		
1st Semester			2nd Semester	
Course	Hours		urse	Hours
*Eng 101 Composition	3		3 102 Composition (Eng 101)	3
Gen Ed [Hist 110 or 120]	3		n Ed [PSc 120]	3
Foreign Language	5		eign Language	5
Gen Ed [Math 110 or equiv]	3	Eng	g Elective	3
HPER 101 Intro to P.E.	2	Eco	on 180	3
Psy 120 Fresh Orient	1			17
	17			
*Students who qualify may take Eng	111 instead	of Eng 1	01 and Eng 102	
students who quality may take the	I I I IIIsteau	of Ling 1	of and thig for.	
	SOPHO	OMORI		
English Elective	3	Eng	glish Elective	3
Gen Ed [Speech]	3	Eng	glish Elective	3
Gen Ed [Biological Science]	4	Ge	n Ed [Physical Science]	5
Gen Ed [HPER 160]	2	Ge	n Ed [Social or Behavioral Science	ce] 3
**Eng 315	3	Or		
Or		**Er	ng 216 or Eng 310	3
Gen Ed [Soc or Beh Sci]			ctive	3

		onder of	31001
	JU	NIOR	
English Elective	3	Eng 400 or Eng Elective	3
***Eng 301 or Eng Elective	3	English Elective	3
English Elective	3	Gen Ed [Fine Art]	3
Electives	6	Electives	6
	15		15
English Electives		NIOR	
Electives	6	English Electives	6
tiectives	9	Electives	9
	15		15
**Students must choose one cours 315 is offered fall semesters only;	e from 216, 3 216 and 310	10, or 315. spring semesters only.	
***Students are required to take EI Eng 400 is offered spring semesters	THER Eng 310	or Eng 400. Eng 301 is offered fall semes	ters only;
( ) Prerequisites			
[ ] Dept Recommendations			
[ ] Dept Recommendations		For Additional Information Contact Dr. Steven H. Gale Office: 314 Hearnes Hall Phone: (417) 624-8100 Ext. 235	:
BACHEL	OR OF SCI	ENCE IN EDUCATION MAJOR COD	E 0842
		DUCATION	
Pl	an B-Single	Teaching Field	
		Order of Study	
3	ouggested C	order of Study	
	FRES	HMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Psy 110 Psychology of Human		+ Eng Elective (Eng 101)	3
Development	5	Gen Ed [PSc 120]	3
Gen Ed [Hist 110 or 120]	3	Gen Ed [Bio Sci]	4
Gen Ed [Math 110 or equiv]	3	Gen Ed [Econ 180]	3
HPER 101 Intro to P.E.	2		16
Psy 120 Freshman Orientation	1		10
	17		
Facility Florida		OMORE	
English Elective	3	English Elective	3
English Elective HPER 160 Personal Health	3	English Elective	3
*Gen Ed [Phys Sci]	2	Psy 302 Except Child	2
Gen Ed [Fine Arts]	5	Psy 310 Educ Psy (Psy 110)	3
Gen La [rine Aits]	3	Gen Ed [Comm 100 Oral Comm]	3
	16		14
*Eng 201 Mades C		IOR	
*Eng 301 Modern Grammar	3	*Eng 400 Hist Eng Lang	3
**Eng 315 or Eng Elective	3	**Eng 216 or 310 or English Elective	3
***Eng 319 Comp for Teachers Elective	3	****English Elective	3
El	3	Ed 330 Structure of Teaching	2
Ed 422 Teaching Reading	3	Ed 331 Microteaching, Sec	2
tu 422 reaching Reading	2	Ed 370 Media Instruction	2
	17	Ed 300 Clinical Experiences	2
			17
English Electives	SEN!		(
Electives	6	Professional Semester, including meth	
	15	first major	16
*201 :	15		16

<sup>\*301</sup> is offered fall semesters only; 400 is offered spring semesters only.

- \*\*Student must select one course from 216, 310, and 315. 315 is offered fall semesters only; 216 and 310 spring semesters only.
- \*\*\*319 is offered fall semesters only.
- \*\*\*\*Plan A (Two Teaching Fields) majors need to take 30 hours of Eng courses; required is Eng 330 Lit for Adolescents, offered spring semesters only.
- + Student must take at least two courses in American Literature and two in English/World Literature.

	Prerec	

[ ] Dept Recommendations

For Additional Information Contact: Dr. Steven H. Gale, Dept Head Office: 314 Hearnes Hall Phone: (417) 624-8100 Ext. 235

**MAIOR CODE 5299** 

#### ASSOCIATE OF SCIENCE ENVIRONMENTAL HEALTH Suggested Order of Study

Order of Study

#### FIRST YEAR

\*\*Prescribed 48 week course at Water and Wastewater School-30 Hrs.

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	5
Bio 101 General Biology	4	Bio 312 Environmental Biology	4
Math 140 Algebra and Trigonometry	5	Eng 101 Composition	3
Psy 120 Freshman Orientation	1	Gen Ed [Literature or Fine Arts]	3
HPER 101 Physical Education	2	Gen Ed [Hist 110 or PSc 120]	3
	17		18
	SUM	IMER	
Gen Ed [Psy 100 or Soc 110]	3		
Comm 100 Oral Communications	3		
	6		
[ ] Dept Recommendations			
		For Additional Information Contact:	
		Dr. Gerald Elick OR	
		Mr. David Tillman	

\*\*This work may be taken prior to entering MSSC or after completing work on College campus.

# BACHELOR OF SCIENCE MAJOR CODE 1299 ENVIRONMENTAL HEALTH TECHNOLOGY MAJOR Suggested Order of Study

Office: 308-C Reynolds Hall Phone: (417) 624-8100 Ext 278

#### **FRESHMAN**

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Bio 112 Botany Survey (Bio 101)	3
Math 140 Algebra & Trigonometry	5	Eng 102 Composition	3
Bio 101 General Biology	4	Hist 110 U.S. History	3
Psy 100 [General Psychology]	3	Art 110 [Intro to Art]	3
HPER 101 Physical Education	2	HPER 160 Personal Health	2
Psy 120 Freshman Orientation	1	Eng 180 [World Masterpiece]	3
15, 125 1155	18		17
	SOPHO	OMORE	
Bio 122 Zoology Survey (Bio 101)	3	Chem 102 General Chemistry II	
Chem 101 General Chemistry I		(Chem 101)	5
(Math 140)	5	Bio 211 Microbiology	5
Econ 201 Principles of Economics	3	Eh 300 Earth Environments	4
Comm 100 Oral Communications	3	MM 350 Business Organization &	
Acct 201 Principles of Accounting	3	Management	3
Acct 201 Timespies of Accounting	17		17

	JUI	NIOR	
Chem 201 Analytical Chemistry I	5	Chem 300 Organic & Bio-chemical	
Bio 431 Animal Physiology OR		Chemistry	
Bio 306 Human Physiology		Gen Ed [Literature or Fine Arts]	3
and Anatomy	5	MM 352 Personnel Management	3
Bio 312 Environmental Biology	4	EH 370 Environmental Health	4
PSc 120 Government: National, State	e &		15
Local	3		13
	17		
		NIOR tion I	
3 trimesters of Study at the Water an taken prior to entering MSSC)	nd Wastewate	er Division of Crowder College. (This work	may be
	Opt	ion II	
Bio 305 Genetics	4	EHT 450 Practicum	12
Bio 332 Entomology	3		12
Bio 361 Parasitology	4		
Bio 362 Virology	3		
	14		
( ) Prerequisites			
[ ] Dept Recommendations		For Additional Information Contact:	
		Dr. Gerald Elick or Mr. David Tillm. Office: 308-C Reynolds Phone: (417) 624-8100 Ext 278	
Su		SINESS MAJOR rder of Study	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Acct 201 Principles of Accounting I	2	Acct 202 Principles of Accounting II	
(Math 131)	3	(Acct 201)	3
Business Elective [GB 101 Intro to		Elective [Computer Science]	3
Business]	3	Gen Ed [Hist 110 or PSc 120]	3
GB 115 Business/Math Calculators	3	Comm 100 Oral Communications	3
Eng 101 Composition Math 30 Intermediate Algebra OR	3	HPER 101 or 160	2
Math 110	3	Gen Ed [Literature or Fine Art]	3
Psy 120 Freshman Orientation	1		17
137 128 Trestinair Chentation	16		
	10		
	SECONI	D YEAR	
Business Elective [GB 320 Business		MM 300 Principles of Marketing	
Communications]	3	(Econ 202)	3
GB 301 Business Law I	3	Econ 202 Principles of Economics	3
MM 350 Principle of Management	3	Gen Ed [Bio 101 or Phys 100]	4-5
Econ 201 Principles of Economics	3	GB 302 Business Law II	3
Gen Ed [Psy 100 General Psychology		Business Elective	3
Soc 110]	3		17
( ) 0	15		
( ) Prerequisite			
[ ] Dept Recommendation		For Additional Information Contact: Dean of School of Business Office: 117 Business School Bldg.	

Electives must be selected from the business areas of personnel management, promotional strategy, retailing, salesmanship, and business communications. Selestions from psychology and computer science are also valid.

Phone: (4170 624-8100 Ext 319

# BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION GENERAL BUSINESS MAJOR Suggested Order of Study

#### FRESHMAN

2nd Semester ourse Hours
ourse Hours
ng 102 Composition (Eng 101)
en Ed [Hist 110 or 120] 3
Sc 120 Government: National, State, &
Local 3
en Ed [Comm 100 Oral
Communications] 3
B 115 [Business Math/Calculators] 3
PER 101 Intro P.E2
17
RE
con 202 Principles of Econ 3
B 320 Business Communications 3
cct 202 Principles of Accounting II
(Acct 201) 3
Gen Ed [Phys 100] 5
Gen Ed [Fine Arts]3
17
GB 337 Managerial Data Processing 3
con 350 Financial Management 3
Required Business Elective Select one
from: GB 302, Econ 300, MM 441, GB
322
lectives8
17
AM 452 Business Policy 3
Elective in Marketing & Management or
above 3
Elective in General Business 300 or above 3
Electives6
15
For Additional Information Contact:
Dean of School of Business
Office: 117 Business School Bldg.

# BACHELOR OF ARTS HISTORY

**MAJOR CODE 2205** 

# Suggested Order of Study

#### **FRESHMAN**

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Hist 110 U.S. History 1492-1877	3	Hist 120 U.S. History 1877-Present	3
Eng 101 Composition	3	Eng 102 Composition	3
Math 110 Intro to College Math	3	PSc 120 U.S., State, Local Government	3
HPER 101 Intro P.E. Activity	2	Bio 101 General Biology	4
Gen Ed [Humanities or Fine Arts]	3	HPER 160 Personal Health	2
Psy 120 Freshman Orientation	1		15
	15		

	SOPH	OMORE	
Hist 130 Western Civilization to 1660	3	Hist 140 Western Civilization	
Foreign Language	5	1660-Present	3
Comm 100 Oral Communications	3	Foreign Language	5
Gen Ed [Literature] Elective	3	Econ 201 Principles of Econ I	3
Liective	3	Soc 110 Intro to Sociology	3
	17	Elective	3
			17
War file Division 1100	-	NIOR	
Hist [Upper Division U.S.]	3	Hist [Upper Division U.S.]	3
Phys 100 Fundamentals of Physical Science	_	Minor Area	6
Gen Ed [Humanities or Fine Arts]	5	Electives	6
Minor Area	3		15
Millor Area	3		
	14		
Hist [Upper Division European]		IOR	
Hist [Upper Division History]	3	Hist [Upper Division European]	3
Minor Area	3	Hist [Upper Division History]	3
Elective	6	Minor Area	6
Liective	3	Electives	4
[ ] Department Recommendations	15		16
1 7 Familiary recommendations		F- Address Add	
		For Additional Information Contact:	
		Dr. Robert Markman	
		Office: Library Annex, Room 12 Phone: (417) 624-8100 Ext 247	
		Filone. (417) 624-8100 Ext 247	
		rder of Study	
1st Comments	FRESH		
1st Semester Course	L	2nd Semester	
Hist 110 U.S. History 1492-1877	Hours 3	Course	Hours
Eng 101 Composition	3	Hist 120 U.S. History 1877-Present	3
Psy 110 Psychology of Human	3	Eng 102 Composition	3
Development (or Psy 100 & 301)	5	PSc 120 U.S., State, Local Government Bio 101 General Biology	3 4
Math 110 Intro College Math	3	HPER 101 Intro to P.E.	
Psy 120 Freshman Orientation	1	THER TOT INTO TO F.E.	2
_	15		15
	SOPHO	MORE	
Hist 130 Western Civilization to 1660			
Comm 100 Oral Communications	.5		
Gen Ed (Literature)	3	Hist 140 Western Civilization 1660	3
HPER 160 Personal Health	3 3	to Present	3
THE TOO I CISOHAI FICANTI	3	to Present Econ 201 or Econ 180	3
Phys 100 Fundamentals of Physical	3	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology	3
	3 3 2	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts)	3 3 3
Phys 100 Fundamentals of Physical	3	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts) Psy 310 Educational Psychology	3 3 3 2
Phys 100 Fundamentals of Physical	3 3 2	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts)	3 3 3
Phys 100 Fundamentals of Physical	3 3 2 5 16	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts) Psy 310 Educational Psychology Ed 302 Exceptional Child	3 3 2 2
Phys 100 Fundamentals of Physical	3 3 2	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts) Psy 310 Educational Psychology Ed 302 Exceptional Child  OR	3 3 2 2
Phys 100 Fundamentals of Physical Science  Hist (Upper Division U.S.) Geog 211 Regions & Nations	3 3 2 5 16	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts) Psy 310 Educational Psychology Ed 302 Exceptional Child  OR Hist (Upper Division U.S.)	3 3 2 2 2 16
Phys 100 Fundamentals of Physical Science  Hist (Upper Division U.S.) Geog 211 Regions & Nations Ed 300 Clinical Experiences	3 3 2 5 16 JUNI 3	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts) Psy 310 Educational Psychology Ed 302 Exceptional Child  OR Hist (Upper Division U.S.) Hist (Upper Division European or Orier	3 3 2 2 2 16 3 atal) 3
Phys 100 Fundamentals of Physical Science  Hist (Upper Division U.S.) Geog 211 Regions & Nations Ed 300 Clinical Experiences Ed 330 Structures of Teaching	3 3 2 5 16 JUNI 3 3 2 2	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts) Psy 310 Educational Psychology Ed 302 Exceptional Child  OR Hist (Upper Division U.S.)	3 3 2 2 2 16
Phys 100 Fundamentals of Physical Science  Hist (Upper Division U.S.) Geog 211 Regions & Nations Ed 300 Clinical Experiences	3 3 2 5 16 JUNI 3 3 2	to Present Econ 201 or Econ 180 Soc 110 Intro to Sociology Gen Ed (Humanities or Fine Arts) Psy 310 Educational Psychology Ed 302 Exceptional Child  OR Hist (Upper Division U.S.) Hist (Upper Division European or Orier Soc Elective (Upper Division)	3 3 2 2 2 16 3 antal) 3 3

#### SENIOR Professional Semester Hist (Upper Division) (498 highly recom-16 mended) Hist (Upper Division European or Oriental) 3 5 Electives 3 Gen Ed (Fine Arts) 2 Ed 422 Reading in the Sec. Sch. Dept. Recommendation For Additional Information Contact: Dr. Tom L. Holman Office: Library Annex, Room 012 Phone: (417) 624-8100 Ext 247 BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0839 **INDUSTRIAL ARTS** Suggested Order of Study **FRESHMAN** Hours Course Course Hours Eng 102 Composition 3 3 Eng 101 Composition 3 Hist 110 U.S. History Psy 120 Freshman Orientation 1 3 Draf 130 Machine Drafting Mach 100 Intro Mach Tool 5 Econ 180 American Economics 3 3 Draf 110 Intro Drafting 2 HPER 160 Personal Health HPER 101 Intro to P.E. 3 Math 130 College Algebra 14 17 SOPHOMORE 5 Phys 100 Physical Science Comm 100 Oral Communications 3 Mach 260 Fund of Metallurgy 3 Psy 110 Psychology of Human 5 Development 4 Bio 101 General Biology Draf 220 Architectural 3 3 Art 100 Art Composition 3 Drafting 3 IA 340 Power Technology IA 310 Intro to Plastics 3 16 Educ 200 Field Experiences 1 17 **JUNIOR** IA 301 Wood Technology (IA 300) Educ 300 Clinical Experiences 2 IA 322 Electricity/Electronics 2 Educ 330 Structures of Teaching 3 PSc 120 U.S., State, & Local Government 2 Educ 331 Microteaching 2 2 Educ 302 Exceptional Child Educ 370 Media Gen Ed [Fine Art or Lit] IA 300 Woodworking & Wood 15 4 Construction 3 IA 321 Industrial Electricity 15 **SENIOR** Educ 402 Foundation of Education Eng 281 or 282 American Lit 3 3 Educ 341 Teaching I.A. in the IA 335 Shop Organization & Mngt. Secondary School Educ 422 Reading in the Secondary Educ 412 Measurement & Evaluation School 2 2 Educ 432 Critical Issues 2 Psy 310 Education Psychology 8 5 Educ 462 Student Teaching Electives 16 15

For Additional Information Contact:

Mr. Dennis K. Sutton Office: 117 Matthews Building Phone: (417) 624-8100, Ext 305

#### BACHELOR OF SCIENCE INFORMATION SYSTEMS (BUSINESS OPTION) Suggested Order of Study

**MAJOR CODE 5105** 

#### FRESHMAN

	FRES	HMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Comp 100 Intro to Data Processing	3	Comp 120 Intro to Programming	3
Math 131 Finite Math	3	Acct 201 Principles of Acct I	3
Eng 101 Freshman Composition	3	Eng 102 Freshman Composition	3
Psy 100 General Psychology	3	Bio 101 General Biology	4
Hist 110 ot 120 U.S. History	3	HPER 101 PE Activity	2
HPER 160 Personal Health	2	THE TOTTE METITY	
Psy 120 Freshman Orientation	1		15
	18		
	SOPHO	OMORE	
Computer Elective	3	Comp 240 Statistical Applications	3
Acct 202 Principles of Acct II	3	Computer Elective	3
Econ 202 Micro Economics	3	Acct 310 Cost Accounting	3
Phys 100 Fund of Phys. Science	5	PSc 120 U.S., State Government	3
Gen Ed [Literature]	3	Gen Ed [Literature or Fine Art]	
	17	served [Enerature of Time Att]	3
	**		15
CIC 242 C	JUN	IOR	
CIS 310 System Software and		CIS 300 Systems Analysis and Design	3
Communication	3	CIS 350 Program Structures and	
CIS 320 Operations Modeling	3	Techniques	3
Comm 103 Business and Professional		MM 350 Prin. of Management	3
Speech	3	Professional Concentration	3
Gen Ed [Fine Art]	3	Elective	3
Elective	3		15
	15		15
CIS 440 A C	SENI	OR	
CIS 410 Information System Analysis	3	CIS 420 Systems Design and	
CIS 450 Computerware	3	Implementation	3
MM 441 Organizational Behavior	3	Professional Concentration	3
Professional Concentration	3	Professional Concentration	3
Elective	3	Elective	3
	15	Elective	3
			15
Computer Electives: Comp 130 (BASIC	C), Comp 2	30 (RPG II), Comp 234 (COBOL) or other of	om
	puter lan	guages	Om-
Professional Concentration:		GG	
Courses selected from Accounting, Eco	nom-	F Aller Inc	
ics. General Business or Marketing		For Additional Information Contact:	

ics, General Business, or Marketing and Management with approval of advisor.

Dr. John Cragin Office: 223 Matthews Hall Phone: (417) 624-8100 Ext 224 Toll Free in MO: 1-800-392-4811

#### BACHELOR OF SCIENCE INFORMATION SYSTEMS (TECHNICAL OPTION) Suggested Order of Study

**MAJOR CODE 5105** 

#### **FRESHMAN**

1st Semester		2nd Semester	
	Hours	Course	Hours
Course Math 140 College Algebra and	110015	Comp 120 Intro to Programming	3
Trigonometry	5	Math 150 Calculus I	5
Eng 101 Freshman Composition	5 3	Bio 101 General Biology	4
Psy 100 General Psychology	3	HPER 101 PE Activity	2
Hist 120 U.S. History	3	Eng 102 Freshman Composition	3
HPER 160 Personal Health	2		17
TIFER 100 Felsonal Fleature	16		
	SOPHO	OMORE	
Computer Elective	3	Computer Elective	3
Math 250 Calculus II	5	Math 260 Calculus III	5
Phys 201 General Physics I	4	Phys 202 General Physics II	3
Econ 202 Micro Economics	3	Gen Ed [Literature or Fine Arts]	3
	15	Elective	3
			17
	JUN	IOR	
CIS 240 Statistical Computer Applications 3		CIS 350 Program Structure & Techi	niques 3
CIS 320 Operations Modeling 3		Computer Elective	3
Phys 203 General Physics III	4	Math 350 Numerical Analysis	
Comm 103 Business and Professional		PSc 120 U.S., State Government	3
Speech	3	Gen Ed [Fine Art]	3
Gen Ed [Literature]	3		15
	16		
	SEN	NIOR	
CIS 450 Computerware	3	CIS 310 System Software	
CIS 330 Assembler Language Programming 3		and Communication	3
Professional Concentration	3	CIS 460 Compilers	3
Professional Concentration	3	Professional Concentration	3
Elective	3	Elective	6
LICCITO	15		15

Computer Electives: Comp 130 (BASIC), Comp 230 (RPG II), Comp 234 (COBOL), or other computer languages.

Professional Concentration:

Courses approved by advisor from Physics, Mathematics, Chemistry, Biology or other approved areas. For Additional Information Contact: Dr. John Cragin Office: 223 Matthews Hall Phone: (417) 624-8100 Ext 224 Toll Free in MO: 1-800-392-4811

#### MISSOURI SOUTHERN STATE COLLEGE Joplin, Missouri 64801

#### LAW ENFORCEMENT MAJOR MAJOR CODE 5505 Suggested Order of Study-Associate of Science Degree

	FIRST	YEAR	
1st Semester		2nd Semester	
	Hours		Hour
Eng 101 Composition	3	Psy 100 General Psychology	
Math 110 Intro to College Math	3	Phys 100 Fundamentals of Physical	
Soc 110 Intro to Sociology	3	Science	
LE 100 Intro to Law Enforcement	3	Soc 210 Social Problems	
LE 110 Police Organization &	3	LE 150 Interview & Report Writing	3
Administration	2	DE 130 Merview & Report Writing	2
Psy 120 Freshman Orientation		PSc 120 Government: National, Sta	
HPER 160 Personal Health	1	& Local	3
nrek 160 Personal Health	2		16
	17		
	SUM	IMER	
LE 190 Supervised Police Work	6		
	SECON	D YEAR	
1st Semester		2nd Semester	
6 100 0 1 6	Hours		Hours
Comm 100 Oral Communications	3	Soc 312 Juvenile Delinquency	3
Soc 351 Criminology	3	HPER 220 First Aid	2
LE 200 Criminal Investigation	3	LE 250 Criminal Law	3
LE 210 Criminal Procedures	3	LE 290 Police Supervision & Manag	ement 3
Psy 221 Psychology of Personal		Gen Ed [Fine Arts]	3
Adjustment	. 3	Advisor Approved Elective	3
	15	ravisor reproved elective	17
	.5	TOTAL	71 hours
		For Additional Information Contact Mr. Don Seneker Office: Police Academy RM 104 Phone: (417) 624-8100 Ext 302	t:
MACH	IINE TECHN	OF SCIENCE MAJOR COD NOLOGY MAJOR rder of Study	E 5399
34	FIRST		
1st Semester	FIKSI	2nd Semester	
Course	Hours		
Mach 100 Intro to Machine Tool	Hours	Course	Hours
		Mach 110 Advanced Machine Tool	
Processes	5	Processes	5
Draf 110 Intro Drafting	3	Gen Ed [Literature or Fine Arts]	3
Math 130 College Algebra	3	Draf 130 Machine Drafting	3
Psy 100 General Psychology	3	Math 112 Trigonometry	3
Psy 120 Freshman Orientation	1	Mach 160 Inspection & Gaging	2
HPER 101 Intro P.E. Activity	2	,	16
	17		10
	SECONE	VEAR	
Mach 210 Fundamentals of Cutting T		Mach 240 Fundamentals of Toolmak	king 5
Eng 101 Composition	2	C 400 O L C	

3

Eng 101 Composition

Science

Phys 100 Fundamentals of Physical

Mach 260 Fundamentals of Metallurgy

Comm 100 Oral Communications or

Comm 103 or Business &

Elective [Econ 180 American Economic System]

Gen Ed Hist 110 or PSc 120

Professional Speech

Elective [Technical]

3

3

3

3 17

#### Dept Recommendations

Mach 298 Special Topics

 Technical Electives should be selected from: Comp 120 Intro to Programming or Comp 130 Elementary Programming Draft 120 Descriptive Geometry Draft 202 Tool Design Draft 204 Mechanical Design

For Additional Information Contact: Mr. Robert Nickolaisen Office: 224 Matthews Hall Phone: (417) 624-8100 Ext 351

BACHELOR OF SCIENCE MANAGEMENT-TECHNOLOGY Suggested Order of Study **MAJOR CODE 4998** 

The Bachelor of Science in Management-Technology is a **transfer** degree program and requires a minimum of an Associate of Science degree (or equivalent) in an acceptable technological field for admission to the program. The student **must apply** for admission to the program in the first semester of the junior year.

Associate of Science Degree (or equivalent) in an acceptable technological field

#### PLUS

GENERAL EDUCATION (46) Hours Eng 101 Composition Eng 102 Composition (Eng 111 satisfies Eng 101 & 102) 3 Communications 3 Check one: Comm 100 Oral Communications Comm 103 Bus & Prof Speech Math 131 or above 3 (Write in		PL		
Eng 102 Composition (Eng 111 satisfies Eng 101 & 102) 3 Acct 202 Prin of Acct I (Math 131) 3 Acct 202 Prin of Acct II (Math 131) 3 Acct 202 Prin of Acct II (Math 131) 3 Acct 202 Prin of Acct II (Math 131) 3 Acct 202 Prin of Acct II (Math 131) 3 Acct 202 Prin of Acct II (Math 131) 3 GB 302 Business Communications 3 GB 301 Business Law II 3 GB 302 Business Law II 3 Business Law II 3 GB 302 Business Law II 3 Business Law II 3 GB 302 Business Law II 3 Business	GENERAL EDUCATION (46)		BSMT BUSINESS CORE REQUIREMENTS	
To 1 & 102)  Communications  Check one:  Comm 100 Oral Communications  Comm 103 Bus & Prof Speech  Math 131 or above  Merite in	Eng 101 Composition	3		
Communications Comm 100 Oral Communications Comm 100 Oral Communications Comm 100 Bus & Prof Speech Math 131 or above 3 (Write in	Eng 102 Composition (Eng 111 satisf	fies Eng		
Check one: Comm 100 Oral Communications Comm 103 Bus & Prof Speech Math 131 or above 3 (Write in	101 & 102)	3		
Check one: Comm 100 Oral Communications Comm 103 Bus & Prof Speech Math 131 or above 3 (Write in	Communications	3		
Comm 103 Bus & Prof Speech  Math 131 or above 3 (Write in			GB 301 Business Law I	
Comm 103 Bus & Prof Speech Math 131 or above 3 Econ 202 Prin of Econ I (Math 131) 3 Econ 202 Prin of Econ I (Math 131) 3 Econ 350 Financial Management 3 HPER 101 P.E. Activity 2 MM 300 Prin of Management 3 HPER 160 Personal Health 2 MM 350 Prin of Management 3 Fine Arts Check two: Art Theatre Foreign Language (beyond degree requirement) Literature Music Philosophy (Write in	Comm 100 Oral Communications			
Math 131 or above (Write in				3
(Write in		3	Econ 202 Prin of Econ II	3
HPER 101 P.E. Activity 4 PFER 160 Personal Health 5 Check two: 5 Art 6 Theatre 6 Foreign Language (beyond degree requirement) 6 Literature 6 Music 7 Philosophy 7 (Write in		)	Econ 350 Financial Management	3
HPER 160 Personal Health Literature-any level qualified 3 MM 350 Prin of Marketing 3 MM 352 Personnel Management 3 MM 352 Personel Management 3 MM 352 Personel Management 3 MM 352 Personsel Management 3 MM 412 Marketing Management 4 () Prerequisites 4 () Prere		2	MM 300 Prin of Management	3
Literature-any level qualified 3 Fine Arts Check two: Art Theatre Foreign Language (beyond degree requirement) Literature Music Philosophy (Write in		2	MM 350 Prin of Marketing	
Fine Arts Check two: Art Theatre Foreign Language (beyond degree requirement) Literature Music Philosophy (Write in		3	MM 352 Personnel Management	3
Check two: Art Theatre Foreign Language (beyond degree requirement) Literature Music Philosophy (Write in				
Art Theatre Foreign Language (beyond degree requirement) Literature Music Philosophy (Write in			*BSMT BUSINESS ELECTIVES (9)	
Theatre Foreign Language (beyond degree requirement) Literature Music Philosophy (Write in			Select 9 hours from:	
ment) Literature Music Philosophy (Write in	,		Acct 310 Cost Accounting	3
ment) Literature Music Philosophy (Write in		require-	MM 401 Promotional Strategy	3
Music Philosophy (Write in			MM 431 Production Management	3
Music Philosophy (Write in			MM 452 Business Policy	3
Philosophy (Write in			GB 321 Business Statistics I	
(Write in			**GB 337 Managerial Data Processing	
Biological Science Physical Science Hist 110 or 120 3 PSc 120 U.S. State Gov't 3 Econ 180 (or any Econ courses for which qualified) 3 Behavioral and Social Science 3 Check One: Psychology Sociology Economics History Political Science Geography (Write in		)	MM 412 Marketing Management	3
Physical Science Hist 110 or 120 PSc 120 U.S. State Gov't Scon 180 (or any Econ courses for which qualified) Behavioral and Social Science Psychology Sociology Economics History Political Science Geography (Write in				
Hist 110 or 120 PSc 120 U.S. State Gov't Econ 180 (or any Econ courses for which qualified) Behavioral and Social Science Check One: Psychology Sociology Economics History Political Science Geography (Write in		5	( ) Prerequisites	
PSc 120 U.S. State Gov't  Econ 180 (or any Econ courses for which qualified)  Behavioral and Social Science  Check One: Psychology Sociology Economics History Political Science Geography (Write in			, , ,	
Econ 180 (or any Econ courses for which qualified)  Behavioral and Social Science  Check One: Psychology Sociology Economics History Political Science Geography (Write in		3	The BSMT requires a total of 124 hours a	ind
qualified) 3 credit (course numbered 300 or above)  Behavioral and Social Science 3 Check One: *Substitutions may be made with advisor approval. Sociology Economics *Not for Computer Science degrees. History Political Science For Additional Information Contact: Geography Dean of School Business (Write in		which	must include 40 hours of upper division	n
Behavioral and Social Science 3 Check One: Psychology Sociology Economics History Political Science Geography (Write in		3	credit (course numbered 300 or above)	
Check One: Psychology Sociology Economics History Political Science Geography (Write in				
Psychology Sociology Economics History Political Science Geography (Write in			*Substitutions may be made with advisor a	ap-
Sociology Economics History Political Science Geography (Write in			proval.	
Economics  History  Political Science  Geography (Write in			·	
History Political Science Geography (Write in) For Additional Information Contact: Dean of School Business Office: 117 Business School Bldg.			**Not for Computer Science degrees.	
Political Science For Additional Information Contact: Geography Dean of School Business (Write in				
Geography Dean of School Business (Write in			For Additional Information Contact:	
(Write in				
Office: 117 Business center - 1-19.		)		
	(**************************************			

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION MARKETING AND MANAGEMENT

### Suggested Order of Study

	FRES	HMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Gen Ed [Fine Arts]	3	Eng 102 Composition	3
Eng 101 Composition	3	Hist 110 U.S. History	3
Math 131 Finite Math	3	Elective [GB 115 Business Math/	
PSc 120 Government: National, State 8		Calculators]	3
Local	3	Gen Ed [Comm 100 Oral Comm]	3
Elective [OA 101 Typewriting I]	3	Gen Ed [Fine Arts]	3
Psy 120 Freshman Orientation	1	HPER 101 Intro to P.E.	2
	16		17
	SOPH	OMORE	
Acct 201 Principles of Accounting I (M	ath	Acct 202 Principles of Accounting II	
131)	3	(Acct 201)	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Gen Ed [Bio 101 General Biology or		GB 320 Business Communications	3
equivalent]	4	Phys 100 Fundamentals of Physical	
Gen Ed [Humanities or Literature]	3	Science or equiv	5
HPER 160 Personal Health	2	Electives [Comp 100 Intro to Data	
	15	Processing	3
			17
	JUN	IIOR	
MM 300 Principles of Marketing	•	MM 312 Retailing (MM 300)	3
(Econ 202)	3	MM 352 Personnel Management	5
MM 350 Principles of Management	3	(MM 350)	3
GB 301 Business Law I	3	GB 337 Managerial Data Processing	3
GB 321 Business Statistics I (Math 131)	3	Econ 350 Financial Management	3
Elective	3	Required Business Elective	3
	15	Choose one from: GB 302, Econ 300,	
		GB 322, MM 441	4
		_	15
	CEN	IOR	13
MM 401 Promotional Strategy		IOR	
MM 412 Marketing Management	3	MM 452 Business Policy	3
MM 431 Production Management	3	Electives/Business or Econ 300 or above	3
Elective/Business or Econ 300 or above	3	Electives	9
Electives	3		15
Liectives	3		
( ) Prerequisites	15		
[ ] Dept Recommendation			
[ ] Dept Recommendation		For Additional Information Contact: Dean of School of Business	
		Office: 117 Business School Bldg. Phone: (417) 624-8100 Ext 319	

#### BACHELOR OF SCIENCE MATHEMATICS Suggested Order of Study

#### **MAJOR CODE 1701**

#### **FRESHMAN**

#### 1st Semester 2nd Semester Course Hours Course Hours Math 150 Calculus w/Analytic Geometry 5 Math 250 Calculus II 5 Chem 101 General Chemistry I 5 Eng 102 Composition 3 Eng 101 Composition 3 Phys 210 General Physics 4 Gen Ed [Literature or Fine Art] 3 Comp 120 Intro Programming 3 Psy 120 Freshman Orientation Comm 100 Oral Communications 1 3 17 18

	SOPHO	OMORE	
Math 260 Calculus III	5	Math 300 Fundamentals of Math	3
Econ 201 Principles of Economics	3	Math Elective [322]	3
Hist 110 or 120 U.S. History	3	Psy 100 or Soc 110	3
HPER 101 P.E. Activity	2	Gen Ed [Literature or Fine Art]	3
Phys Sci Elective	3-4	Elective [Principles of Econ]	3
Tity's Set Electric	16-17		15
	JUN	IOR	
Math Elective	6	Math Elective	6
Gen Ed [Lit or Fine Art]	3	Bio 101 General Biology	4
Chemistry or Physics	3-4	HPER 160 Personal Health	2
PSc 120 Government	3	Electives	6
100 100 0000000000000000000000000000000	15-16		18
	SEN	IOR	
Math Electives	6	Math Electives	6
Electives	9	Electives	9
2.00	15		15

Chem 100, Phys 100, Geol 110, not acceptable for any of the eighteen credit hour requirement in Chemistry or Physics.

For Additional Information Contact: Dr. J. Larry Martin Office: S-200 Reynolds Hall Phone: (417) 624-8100 Ext 240

## BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0833 MATHEMATICS EDUCATION Suggested Order of Study

5	uggestea O	rder of Study	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Math 150 Calculus w/Analytical		Math 250 Calculus w/Analytical	
Geometry I	5	Geometry II	5
Eng 101 Composition	3	*Chem 101 or Phys 201	4-5
Psy 110 Psychology of Human		Eng 102 Composition	3
Development	5	Comp 120 Computer Programming	3
HPER 101 Intro to P.E.	2		15-16
Psy 120 Freshman Orientation	1		
13, 120 (103)	16		
	SOPH	OMORE	
Math 260 Calculus w/Analytical		Math 300 Fundamentals of Math	3
Geometry III	5	Bio 101 General Biology	4
*Chem or Phys	3-5	Hist 110 or 120 U.S. History	3
Comm 100 or 131	3	Gen Ed [Art, Music, Theatre, Philoso	
Gen Ed [Literature]	3	Elective	3-5
HPER 160 Personal Health	2		16-18
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	16-18		
	JUN	NIOR	
Math 332 or Math 361	3	Math Elective	6
Math Elective	3	PSc 120 Government	3
Educ 300 Clinical Experience	2	Psy 310 Educ Psychology	2
Educ 330 Structures of Teaching	2	Psy 302 Exceptional Child	2
Educ Micro Teaching	2	Gen Ed [Literature or Fine Art]	3
Educ 370 Instructional Media	2		
Econ 180 Am Econ System	3		16
	17		

	SEN	NIOR	
Math 332 or 361	3	Educ 339 Math Methods	2
Math Elective	3	Educ 402 Foundations of Educ	2
Electives	9		
Liectives	-	Educ 432 Critical Issues	2
	15	Educ 422 Reading in Secondary School	
		Required Elective [Educ 412, 420, 423,	
		or Psy 412]	2
		Educ 462 Student Teaching	8
*Ten hours in the physical sciences (ex	clud-		18
ing Chem 100, Phys 100 and Geol 1		E A Live La C	
are required.	,	For Additional Information Contact:	
		Dr. J. Larry Martin	
Electives must be approved by Math ac	dvisor	Office: 200 Science-Math Building	
[ ] Dept Recommendation	IVISOL.	Phone: (4170 624-8100 Ext 240	
BA	CHELOR	OF SCIENCE MAJOR CODE 1	1223
		ECHNOLOGY	223
Sug	gested O	order of Study	
	FRESH	HMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	5
Eng 101 Composition	3	Bio 121 General Zoology	4
Math 140 Algebra & Trigonometry	5	Gen Ed [Hist 110 or 120]	3
HPER 101 Physical Activity	2	Eng 102 Composition	
Psy 120 Freshman Orientation	1	Ling 102 Composition	3
13y 120 Presiman Offendation	16		15
		OMORE	
Chem 201 Analytical Chemistry I (Chemistry I)			
102)	5	Chem 300 Intro to Modern Organic	_
Bio 231 Fundamentals of Medical	5	Chemistry (Chem 102)	5
	-	Bio 305 Genetics	4
Microbiology	5	Gen Ed [Communications]	3
Gen Ed [Literature]	3	Gen Ed [PSc 120]	3
Gen Ed [Behavioral or Social Science]	3	MT 200 Intro to Medical Technology	. 1
HPER 160 Personal Health	2		16
	18		
	JUN	IOR	
Phys 151 Elementary College Physics I		Chem 421 Analytical Chemistry II	
(Math 140)	5	(Chem 201)	5
Bio 306 Human Physiology & Anatomy		Phys 152 Elementary College Physics II	,
(Bio 121)	5	(Phys 151)	3
Bio 361 Parasitology or Bio 362	3	Bio 456 Immunology	
Virology	3-4	Gen Ed [Literature or Fine Art]	3
Gen Ed [Literature or Fine Art]	3		3
-	<u></u>	Gen Ed [Econ 180]	<u>3</u>
		100	17
(44 an annual d	SENI		
		of Medical Technology)	
MT 401 Clinical Chemistry	10	MT 402 Clinical Microscopy	1
MT 403 Hematology	6	MT 404 Serology	3
	16	MT 405 Clinical Microbiology	7
		MT 406 Immunohematology	3
		MT 407 Special Topics in Medical	
		Technology	2
			16

( ) Prerequisites 1 Dept Recommendations

Course Music 111 Theory

For Additional Information Contact: Dr. Vernon Baiamonte Office: Science-Math Bldg 218 Phone: (417) 624-8100 Ext 241 Dr. Melvyn Mosher Office: S-220 & PA-105 Phone: (417) 624-8100 Ext 214/219

#### **BACHELOR OF ARTS** MUSIC MAJOR

**MAJOR CODE 1005** 

#### Suggested Order of Study **FRESHMAN** 1st Semester

Hours

Orchestra	2
Music 207 Applied Music/Major	2
Music 240 Recital Attendance	Cr
Eng 101 Composition	3
Econ 180 American Economic System	3
HPER 101 Intro to P.E.	2
Psy 120 Freshman Orientation	1
	16
General Education Requirements	
Eng 101 & 102 or equivalent	6
Comm 100, 103, 131	3
Math 110 or higher	3
HPER 101 and 160	4
Hist 110 or 120	
PSc 120	3
Econ 180 or higher	3
	3
Psych, Sociology, Econ, Geog, Hist, PSc	3
Literature	3
Art, Music, Theatre, Literature,	(
Philosophy (1 from 2 areas)	6
Foreign Language	10
Biology	4
Physical Science	5
	56

Music 121 or 191 or 151-Choir, Band, or

Course	Hours
Music 112 Theory	3
Music 109 Sight Singing & Ear Training	, 2
Music 121 or 191 or 151 Choir, Band,	
or Orchestra	2
Music 208 Applied Music/Major	2
Music 240 Recital Attendance	Cr
Eng 102 Composition	3
Bio 101 General Biology	4
	46

2nd Semester

#### **Music Requirements** 9 210 Sight Singing &

Music 109 & 210 signt singing a	
Ear Training	4
Music 111 & 112 & 211 & 212 Th	neory 12
Music 181 Choral Conducting	2
Music 182 Instrumental Conductir	ng
Techniques	2
Music 240 Recital Attendance	Cr
Music 311 & 312 Music History	6
Music 420 Form & Analysis	3
Music 431 Orchestration	3
Music 444 Advanced Conducting	2
Music 450 Senior Recital	Cr
Music Electives	8
Music Applied Major	<b>Semesters</b>
Music-Large Ensemble	3 Semesters
	64

Electives approved by Music advisor

For Additional Information Contact: Dr. Joe Sims, Head, Dept Fine Arts Office: 216 Music Building Phone: (417) 624-8100 Ext 318

# BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0832 MUSIC EDUCATION PIANO MAJOR WITH VOCAL EMPHASIS Suggested Order of Study

	FRESI	IMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Mus 111 Theory	3	Mus 112 Theory	3
Mus 207 Applied Mus-Piano	2	Mus 109 Sight Sing & Ear Tr	2
Mus 105 Applied Mus-Voice	1	Mus 208 Applied Mus-Piano	2
Mus 121 Choir	2	Mus 106 Applied Mus-Voice	1
Mus 240 Recital Attendance	Cr	Mus 121 Choir	2
Eng 101 Composition	3	Mus 131 Intro Prof Mus Educ	1
(Econ 180 Am Economics System)	3	Mus 240 Recital Attendance	Cr
Psy 120 Freshman Orientation	1	Eng 102 Composition	3
	15	(HPER 160 Personal Health)	2
		(Math 110 Intro College Math)	3
			19
At least one summer enrollment i strongly recommended.	s		
	SOPHO	OMORE	
Mus 211 Theory	3	Mus 212 Theory	3
Mus 210 Sight Sing & Ear Tr	2	Mus 182 Instrumental Conduct	2
Mus 181 Choral Conducting	2	Mus 208 Applied Mus-Piano	2
Mus 207 Applied Mus-Piano	2	Mus 106 Applied Mus-Voice	1
Mus 105 Applied Mus-Voice	1	Mus 121 Choir	2
Mus 121 Choir	2	Mus 240 Recital Attendance	Cr
Mus 240 Recital Attendance	Cr	(Hist 110 or 120 U.S. Hist)	3
(HPER 101 Intro P.E. Activity)	2	(Bio 101 General Biology	4
(Psy 110 Growth & Development	5	Educ 300 Clinical Exp	2
(13) 110 Growth & Development	19	Edde 300 Clinical Exp	19
			19
	JUN		
Mus 311 History of Music	3	Mus 312 History of Music	3
Mus 420 Form & Analysis	3	Mus 408 Applied Music-Major	2
Mus 407 Applied Mus-Piano	2	Mus 306 Applied Mus-Voice	1
Mus 305 Applied Mus-Voice	1	Mus 321 Choir	2
Mus 321 Choir	2	Mus 240 Recital Attendance	Cr
Mus 240 Recital Attendance	Cr	Mus 332 Music in Elem School	3
Ed 330 Structures of Teaching	2	Mus 431 Orchestration	3
Ed 331 Microteaching	2	(PSc 120 U.S. State & Local Governm	ent) 3
Ed 370 Instructional Media	2	(Gen Ed [Lit or Theatre])	3
Comm 100 Oral Communications	3		20
	20		
	SEN	IOR	
Mus 432 Music in Public School	2	Mus 335 Teach Mus in Sec Sch	2
Mus 408 Applied Music-Major	2	Ed 402 Foundations of Educ	2
Mus 444 Advanced Conducting	2	Ed 432 Critical Issues/Educ	2
Mus 450 Senior Recital	Cr	Ed 420 Intro Counseling or Psy 412 N	
Mus 240 Recital Attendance	Cr	& Eval in Educ	2
Psy 310 Educational Psychology	2	Ed 464 Student Teaching	8
Ed 302 Exceptional Child	2	and to total and teaching	16
Phys 100 Fund Phys Science	5		10
Educ 422 Reading in Sec Sch	2		
(Gen Ed [Literature])	3		
(Gen Ed [Eneraldic])	20		
( ) Suggested Semester	20		
Dept Reco endations		For Additional Information Co. 1	
DOUBLE CERTIFICATION ADD: Mu 232, 361, 362, 411.	s 231,	For Additional Information Contact: Dr. Joe Sims, Head, Dept Fine Arts Office: 216 Music Bldg. Phone: (417) 624-8100 Ext 318	

# BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0832 MUSIC EDUCATION INSTRUMENTAL MAJOR Suggested Order of Study

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Mus 111 Theory	3	Mus 112 Theory	3
Mus 207 Applied Music-Major	2	Mus 109 Sight Sing & Ear Tr	2
Mus 103 Applied Music-Piano	1	Mus 208 Applied Music-Major	2
Mus 191 or 151 Band/Orch	2	Mus 104 Applied Music-Piano	1
Mus 361 or 231 Perc/String Tech	1	Mus 192 or 150 Band or Orch	2
Mus 240 Recital Attendance	Cr	Mus 232 or 362 Brass or Woodwind	
Eng 101 Composition	3	Technique	1
(Econ 180 Am Economic System)	3	Mus 131 Intro Prof Music Educ	1
Psy 120 Freshman Orientation	1	Mus 240 Recital Attendance	Cr
rsy 120 Hestillian Orientation	16	Eng 102 Composition	3
	10	(HPER 160 Personal Health)	2
		(Math 110 Intro College Math)	3
		(Math 170 mile Conege Math)	20
At least one summer enrollment is			20
strongly recommended.			
Mus 211 Theory	3	Mus 212 Theory	3
Mus 210 Sight Sing & Ear Tr	2	Mus 182 Inst Conducting	2
Mus 181 Choral Conducting	2	Mus 208 Applied Music-Major	2
Mus 207 Applied Music-Major	2	Mus 232 or 362 Brass or Woodwind	
	1	Technique	1
Mus 361 or 231 Perc/Str Tech Mus 291 or 151 Band or Orch	2	Mus 292 or 151 Band or Orch	2
	Cr	Mus 240 Recital Attendance	C
Mus 240 Recital Attendance	2	Bio 101 General Biology	4
(HPER 101 P.E. Activity)		Ed 300 Clinical Experience	2
(Psy 110 Psy Human Development)	5	(Hist 110 or 120 U.S. History)	3
	19	(First 110 of 120 C.S. History)	19
	2	Mus 312 History of Music	3
Mus 311 History of Music	3	Mus 408 Applied Music-Major	2
Mus 420 Form & Analysis	2	Mus 392 or 351 Band or Orch	2
Mus 407 Applied Music-Major	2	Mus 240 Recital Attendance	C
Mus 391 or 351 Band or Orch	_	Mus 332 Music in Elem School	3
Mus 240 Recital Attendance	Cr		3
Ed 330 Structures of Teaching	2	Mus 431 Orchestration	3
Ed 331 Microteaching	2	(PSc 120 Government: U.S.)	
Ed 370 Instructional Media	2	(Gen Ed [Lit or Theatre])	3
Comm 100 Oral Communications	3	Ed 422 Reading in Sec. Sch.	2
	19		21
Mus 411 March Band Methods	1	Mus 335 Teach Mus in Sec Sch	2
Mus 432 Music in Public School	2	Ed 402 Foundations of Educ	- 2
Mus 408 Applied Music-Major	2	Ed 432 Critical Issues & Educ	
Mus 444 Advanced Conducting	2	Ed 420 Intro Counseling OR	
Mus 450 Senior Recital	Cr	Psy 412 Meas & Eval in Educ	
Mus 240 Recital Attendance	Cr	Ed 464 Student Teaching	
Psy 310 Education Psychology	2		16
Ed 302 Exceptional Child	2		
(Phys 100 Fund Phys Science)	5	For Additional Information Contact:	
(Gen Ed [Literature])	3	Dr. Joe Sims, Head, Dept Fine Arts	
(Gen tu [Literature])		Office: 216 Music Bldg.	
	19	Phone: (417) 624-8100 Ext 318	
( ) Suggested semester only			
[ ] Dept Recommendation		Dr. Al Carnine (Vocal) Ext 318	
		Mr. Pete Havely (Band) Ext 282	
		Mr. Bill Elliott (Orch) Ext 243	

## BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0832 MUSIC EDUCATION VOCAL MAJOR

#### Suggested Order of Study

#### **FRESHMAN**

1st Semester	· KESI	2nd Semester	
Course	Hours	Course	Hours
Mus 111 Theory	3	Mus 112 Theory	3
Mus 207 Applied Music-Voice	2	Mus 109 Sight Sing & Ear Tr	2
Mus 103 Applied Music-Piano	1	Mus 208 Applied Music-Voice	2
Mus 121 Choir	2	Mus 104 Applied Music-Piano	1
Mus 240 Recital Attendance	Cr	Mus 121 Choir	2
Eng 101 Composition	3	Mus 131 Intro Prof Music Educ	1
Econ 180 Am Economic System	3	Mus 240 Recital Attendance	Cr
Psy 120 Freshman Orientation	1	Eng 102 Composition	3
	15	HPER 160 Personal Health	2
		Math 110 Intro College Math	3
At least one summer enrollment i strongly recommended.	s		19
	SOPHO	OMORE	
Mus 211 Theory	3	Mus 212 Theory	3
Mus 210 Sight Sing & Ear Tr	2	Mus 182 Inst Conducting	2
Mus 181 Choral Conducting	2	Mus 208 Applied Music-Voice	2 2 1
Mus 207 Applied Music-Voice	2	Mus 204 Piano	
Mus 203 Piano	1	Mus 121 Choir	2
Mus 121 Choir	2	Mus 240 Recital Attendance	Cr
Mus 240 Recital Attendance	Cr	Hist 110 or 120 U.S. History	3
Psy 110 Human Growth & Dev.	5	Educ 300 Clinical Experience	2
	17		15
	JUN	IOR	
Mus 311 History of Music	3	Mus 312 History of Music	3
Mus 420 Form & Analysis	3	Mus 408 Applied Music-Voice	2
Mus 407 Applied Music-Voice	2	Mus 306 Piano	1
Mus 305 Piano	1	Mus 321 Choir	2
Mus 321 Choir	2	Mus 240 Recital Attendance	Cr
Mus 240 Recital Attendance	Cr	Mus 332 Music in Elem School	3
Ed 330 Structures of Teaching	2	Mus 431 Orchestration	3
Ed 331 Microteaching	2	PSc 120 U.S. State Gov't	3
Ed 370 Instructional Media	2	Gen Ed [Lit or Theatre]	3
Comm 100 Oral Communications	3	Mus 310 Vocal Technique	1
	20		20
	SEN	IOR	
Mus 432 Music in Public Sch	2	Mus 335 Teach Mus in Sec Sch	2
Mus 408 Applied Music-Voice	2	Ed 402 Foundations of Educ	2
Mus 444 Advanced Conducting	2	Ed 432 Critical Issues in Ed	2
Mus 450 Senior Recital	Cr	Ed 420 Intro Counseling OR	
Mus 240 Recital Attendance	Cr	Psy 412 Meas & Eval in Educ	2
Psy 310 Educational Psych	2	Ed 464 Student Teaching	8
Ed 302 Exceptional Child	2		16
Phys 100 Fund Phys Science	5		
Ed 422 Reading in Sec. Sch	2		
Gen Ed [Literature]	3		
	20		
( ) Suggested Semester			
[ ] Dept. Recommendation		For Additional Information Contact	t:
Dr. Al Carnine (Vocal) Ext 318		Dr. Joe Sims, Head, Dept. Fine Art	
Mr. Pete Havely (Band) Ext 282		Office: 216 Music Bldg.	-
Mr. Bill Elliot (Orch) Ext 243		Phone: (417) 634 9100 Fut 219	

Phone: (417) 624-8100 Ext 318

Mr. Bill Elliot (Orch) Ext 243

#### ASSOCIATE OF SCIENCE NURSING MAJOR Suggested Order of Study

MAJOR CODE 5208

Students must apply for admission and be accepted into the Nursing Program before they may enroll in Nurs 100, 120, 130, 220, or 240. Applications for the Nursing Program may be obtained from the Department of Nursing Office in Kuhn Hall.

Department of Nursing Office in Kuhr	i Hall.		
	FIRST	YFAR	
1st Semester	111131	2nd Semester	
Course	Hours	Course	Hours
Nurs 110 Fundamentals of Nursing	6	Nurs 110 Maternal & Child Care	9
*Bio 221 Human Anatomy & Physiolo	-	Chem 100 Intro Chemistry	5
Eng 101 Composition	3	Psy 100 General Psychology or Soc 1	10
Math 30 (or above)	3	Intro to Sociology	3
Psy 120 Freshman Orientation	1	0,	17
,	18		
	SUM	AAFD	
None 120 Beachistein Mantal	SUM	MEK	
Nurs 130 Psychiatric-Mental	4		
Health Nursing	4		
	SECON	D YEAR	
Nurs 220 Nursing Physical Illness I	9	Nurs 240 Nursing in Physical Illness	11 9
Bio 231 Fundamentals of Medical		HPER 101 Intro to Physical Activity	2
Microbiology	5	Comm 100 Oral Communications	3
Gen Ed (Literature or Fine Art)	3	Gen Ed (PSc 120 or Hist 110)	3
SEN EU (Entertature en 1 mar 1 ma)	17		17
*Placement in Bio 221 will depend or			
entrance Zoology test scores or com		F. Addising I. I. Contact	
of Bio 121.		For Additional Information Contact:	
01 010 121.		Dr. Betty J. Ipock	
		Office: 208 Kuhn Hall	
		Phone: (417) 624-8100 Ext 322	
		OF SCIENCE LANCE CODE	
		OF SCIENCE MAJOR CODI	5005
		INISTRATION	
Sug	gested O	rder of Study	
	FIRST	YEAR	
1st Semester		2nd Semester	
Course	Hours	Course	
Gen Ed [Psy 100 or Soc 110]	110013		Hours
	2		Hours
Comm 100 Oral Composition	3	GB 320 Business Communications	3
Comm 100 Oral Composition	3	GB 320 Business Communications OA 200 Typewriting III	3
Eng 101 Composition		GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art]	3 3 3
Eng 101 Composition Math 30 Intermediate Algebra	3 3	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160	3 3 3 2
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110	3 3	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110]	3 3 3 2 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation	3 3	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160	3 3 3 2 3 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/	3 3 1	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110]	3 3 3 2 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation	3 3 1	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110]	3 3 3 2 3 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/	3 3 1	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110]	3 3 3 2 3 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/	3 3 1	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110]	3 3 3 2 3 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/	3 3 1	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110]	3 3 3 2 3 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/	3 3 1 — <u>3</u>	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110]	3 3 3 2 3 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/	3 3 1 — <u>3</u>	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110] Elective in Business	3 3 3 2 3 3
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/ Calculators]  OA 213 Secretarial Machines	3 3 1 3 16 SECON	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110] Elective in Business  D YEAR OA 230 Secretarial Procedures	3 3 2 3 3 17
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [GB 115 Business Math/ Calculators]  OA 213 Secretarial Machines Acct 201 Principles of Accounting I (A	3 3 1 3 1 6 SECON 3 Adath	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110] Elective in Business  D YEAR OA 230 Secretarial Procedures OA 220 Dictation & Transcriptions	3 3 3 2 3 3 17
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [CB 115 Business Math/ Calculators]  OA 213 Secretarial Machines Acct 201 Principles of Accounting I (A	3 3 1 1 3 16 SECON	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110] Elective in Business  D YEAR OA 230 Secretarial Procedures OA 220 Dictation & Transcriptions (OA 120)	3 3 3 2 3 3 17
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [CB 115 Business Math/ Calculators]  OA 213 Secretarial Machines Acct 201 Principles of Accounting I (National Principles of Accounting I (National Principles III) GB 301 Business Law I	3 3 1 1 3 16 SECON 3 Alath 3 3	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110] Elective in Business  D YEAR OA 230 Secretarial Procedures OA 220 Dictation & Transcriptions (OA 120) OA 250 Word Processing	3 3 3 2 3 3 17
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [CB 115 Business Math/ Calculators]  OA 213 Secretarial Machines Acct 201 Principles of Accounting I (A	3 3 1 1 3 16 SECON 3 Math 3 3 6	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110] Elective in Business  D YEAR OA 230 Secretarial Procedures OA 220 Dictation & Transcriptions (OA 120) OA 250 Word Processing Gen Ed [Bio 100 or Phys 100]	3 3 2 3 3 17
Eng 101 Composition Math 30 Intermediate Algebra OR Math 110 Psy 120 Freshman Orientation Elective [CB 115 Business Math/ Calculators]  OA 213 Secretarial Machines Acct 201 Principles of Accounting I (National Principles of Accounting I (National Principles III) GB 301 Business Law I	3 3 1 1 3 16 SECON 3 Alath 3 3	GB 320 Business Communications OA 200 Typewriting III Gen Ed [Literature or Fine Art] HPER 101 or HPER 160 Gen Ed [PSc 120 or Hist 110] Elective in Business  D YEAR OA 230 Secretarial Procedures OA 220 Dictation & Transcriptions (OA 120) OA 250 Word Processing	3 3 3 2 3 3 17

Business Electives may include prerequisite courses to OA 200 and OA 220 if needed. Others sho	uld
be selected from Principles of Management, Accounting, Economics, General Psychology, Busin	ness
Math, or Intro to Data Processing.	

Dept Recommendation

) Prerequisite

For Additional Information Contact: Dean of School of Business Office: 117 Business School Bldg. Phone: (417) 624-8100 Ext 319

#### ASSOCIATE OF ARTS

MAJOR CODE 7999

16

**Emphasis** in Paralegal

(This is a general Associate of Arts degree not a Paralegal Degree)

#### FIRST YEAR

LIKSI	ICAK	
	2nd Semester	
Hours	Course	Hours
3	PLS 311 Property	3
3	PLS 312 Civil Litigation	3
3	+ PSc 432 Constitutional Law	3
3	Eng 102 Composition	3
3		3
1		3
2		18
18		,0
SECON	D YEAR	
3	PLS 498 Senior Seminar	3
3	GB 302 Business Law II	3
С	Comm 100 Oral Communications	3
3	Gen Ed [Literature]	3
		3
3		15
16-17		13
	For Additional Information Contact: Mr. Michael Yates Office: Library 129 Phone: (417) 624-8100 Ext 333	
	Hours 3 3 3 3 3 1 2 18 SECON 3 3 4-5 3	Hours  Course  PLS 311 Property  PLS 312 Civil Litigation  PSC 432 Constitutional Law  For 432 Composition  Hist 110 or 120 U.S. History  Math 110 Intro College Math  ESECOND YEAR  PLS 498 Senior Seminar  GB 302 Business Law II  Comm 100 Oral Communications  Gen Ed [Literature]  PLS 491 Internship  For Additional Information Contact:  Mr. Michael Yates  Office: Library 129

## BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0835 PHYSICAL EDUCATION MAJOR(Grades K-12) Suggested Order of Study

	LKESI	IMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
PSc 120 Government-National, State,		Hist 110 or 120 U.S. History	3
Local	3	Bio 121 General Zoology	4
Psy 110 Psychology of Human		Math 110 Intro College Math	3
Development	5	Gen Ed [Econ 180 or 201]	3
Comm 100 Oral Communications	3		16
Psy 120 Freshman Orientation	1		
	15		
	SOPHO	OMORE	
HPER 251 Fundamentals of P.E.		HPER 252 Fundamentals of P.E.	
Activities I	4	Activities II	4
Gen Ed [Eng 180 or 181]	3	Bio 221 Human Anatomy & Physiological	ogy
Gen Ed [Music 110 or Art 110 or The	atre	(Bio 121)	5
110]	3	Psy 310 Educational Psychology	2
Psy 110 Fundamentals of Physical Sci	ience	HPER 335 History & Philosophy of	
or Chem 100	5	Physical Education	2
	15	Gen Ed [Literature or Fine Art]	3

Microbiology

HPER 321 Team Sports

HPER 370 School Health

HPER 351 Theory of Football

Psy 310 Education Psychology

Ed 300 Clinical Experience

Ed 370 Instructional Media Ed 330 Structure of Teaching

Ed 331 Microteaching

	JUNI	OR	
HPER 310 Elementary School	,0111	HPER 312 Teaching Elementary School	
Physical Education Program	3	Physical Education	3
HPER 321 Team Sports	3	HPER 342 Kinesiology (Bio 221)	
HPER 340 Motor Learning	3	HPER 350 Theory of Basketball	
HPER 332 Rhythmic Form & Analysis	2	HPER 352 Theo Spring Sports (Women	
HPER 351 Theory of Football (Men)	2	Ed 300 Clinical Experience	,
	3	Ed 330 Structures of Teaching	
HPER 370 School Health			
Psy 302 Exceptional Child	2	Ed 331 Microteaching	
	18	Ed 370 Intro to Instructional Media	1
	SENI	OP	
HPER 365 Socio-Psychological Aspects		Ed 338 Teaching Health &	
Athletics	2	Physical Education	
	2	Ed 402 Foundations of Educ	
HPER 431 Phys of Exercise	2		
HPER 470 Administration of Physical	2	Ed 432 Critical Issues-Educ	
Education	2	Psy 412 Measurements & Evaluation	
HPER 450 Care & Prevention of Injuries		Ed 464 Student Teaching	
Ed 422 Reading in Sec. Sch.	2		1
Electives	6		
	17		
		For Additional Information Contact:	
		Dr. Max Oldham	
		Office: PE 118	
		Phone: (417) 624-8100 Ext. 316	
PHYSICAL EDUCATION	MAJOR (Grades	NCE IN EDUCATION MAJOR CODE ( AND HEALTH CERTIFICATION s 7-12) der of Study	9033
	FRESH	MAN	
1st Semester		2nd Semester	
Course	Hours		
HPER 160 Personal Health		Course	Hour
Eng 101 Composition	3		
	3	Bio 121 Zoology	
Gen Ed IPSc 120 Govt. Nat. State	3	Bio 121 Zoology Eng 102 Composition (Eng 101)	
Gen Ed [PSc 120 Govt., Nat., State,	3	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120]	
Local]		Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100]	
Local] Psy 100 Psychology of Human	3	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120]	
Local] Psy 100 Psychology of Human Development	3 3 5	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100]	
Local] Psy 100 Psychology of Human	3 3 5 1	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100]	
Local] Psy 100 Psychology of Human Development	3 3 5 1 15	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]	
Local] Psy 100 Psychology of Human Development Psy 120 Freshman Orientation	3 3 5 1	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]	1
Local] Psy 100 Psychology of Human Development Psy 120 Freshman Orientation  HPER 251 Fundamentals of P.E.	3 5 1 15 <b>SOPHO</b>	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]  MORE HPER 252 Fund of PE Act II	1
Local] Psy 100 Psychology of Human Development Psy 120 Freshman Orientation  HPER 251 Fundamentals of P.E. Activities I	3 3 5 1 15	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]  OMORE HPER 252 Fund of PE Act II HPER 335 Hist & Phil PE	10
Local] Psy 100 Psychology of Human Development Psy 120 Freshman Orientation  HPER 251 Fundamentals of P.E. Activities I Psy 221 Psychology of Personal	3 5 1 15 <b>SOPHO</b>	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]  PMORE HPER 252 Fund of PE Act II HPER 335 Hist & Phil PE Gen Ed [Literature]	Hour 1
Local] Psy 100 Psychology of Human Development Psy 120 Freshman Orientation  HPER 251 Fundamentals of P.E. Activities I Psy 221 Psychology of Personal Adjustment	3 5 1 15 <b>SOPHO</b> 4 3	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]  DMORE HPER 252 Fund of PE Act II HPER 335 Hist & Phil PE Gen Ed [Literature] Bio 221 Human Anatomy & Physiology	10
Local] Psy 100 Psychology of Human Development Psy 120 Freshman Orientation  HPER 251 Fundamentals of P.E. Activities I Psy 221 Psychology of Personal	3 5 1 15 <b>SOPHO</b>	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]  MORE HPER 252 Fund of PE Act II HPER 335 Hist & Phil PE Gen Ed [Literature] Bio 221 Human Anatomy & Physiology (Bio 121)	1
Local] Psy 100 Psychology of Human Development Psy 120 Freshman Orientation  HPER 251 Fundamentals of P.E. Activities I Psy 221 Psychology of Personal Adjustment	3 3 5 1 15 <b>SOPHO</b> 4 3 3	Bio 121 Zoology Eng 102 Composition (Eng 101) Gen Ed [Hist 110 or Hist 120] Gen Ed [Comm 100] Gen Ed [Math 110 or higher]  DMORE HPER 252 Fund of PE Act II HPER 335 Hist & Phil PE Gen Ed [Literature] Bio 221 Human Anatomy & Physiology	10

**JUNIOR** 

HPER 342 Kinesiology (Bio 221)

HPER 350 Theory of Basketball

Gen Ed [Econ 180 or Econ 201]

Psy 302 Exceptional Child

DH 310 Nutrition

Gen Ed [Fine Art]

15

3

3

2

1

2

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2

2 17 17

3

2

2

3

3

15

	SEN	IOR	
HPER 431 Physiol of Exercise	2	Ed 338 Teaching Health & P.E.	2
HPER 450 Prevention & Care of Injuries	3	Ed 402 Foundations Education	2
HPER 470 Adm of Physical Ed	2	Ed 442 Critical Issues-Educ	2
HPER 365 Socio-Psy Aspects of Athletics	2	Psy 412 Measurements & Evaluation	2
Ed 422 Reading in Sec. Sch.	2	Ed 464 Student Teaching	8
Electives	_3		16
	14		

For Additional Information Contact: Dr. Max Oldham Office: PE 118 Phone: (417) 624-8100 Ext. 316

#### BACHELOR OF SCIENCE PHYSICS MAIOR

MAJOR CODE 1902

### Suggested Order of Study

Physics students who plan to do graduate work in engineering should include Chem 101, Chem 102, Comp 120, Draf 110 and Draf 120 in their program as well as the following special courses: Chemical Engineering—Chem 201, Chem 302, Chem 401, Chem 402, and Chem 421; Electrical Engineering—Math 351, Math 412, Math 431 and Phys 480 (circuit analysis); Engineering Mechanics—Math 260, Math 351, Math 412, Math 431, and Phys 480 (fluid mechanics and heat transfer); Mechanical Engineering—Draf 130, Phys 480 (fluid mechanics and heat transfer) plus additional courses in machines.

	FRESH	MAN	
1st Semester		2nd Semester	
Course Ho	ours	Course	Hours
Phys 201 General Physics I	4	Phys 202 General Physics II	
Math 150 Calculus I	5	(Math 150, Phys 201)	3
*Chem 101 General Chemistry (Algebra &		Eng 102 Composition	3
Trigonometry)	5	Math 250 Calculus II (Math 150)	5
Eng 101 Composition	3	*Chem 102 General Chemistry II	3
Psy 120 Freshman Orientation	1		16
	17		
	SOPHO	MORE	
Phys 203 General Physics III (Phys 201,	300	Phys 322 Classical Mechanics OR	
Math 250)	4	Phys 341 Thermal Physics	3-4
Math 260 Calculus III (Math 250)	5	Phys 372 Electronic Circuits	4
Gen Ed [PSc 120 Government]	3	Math 322 Differential Equations	3
Gen Ed [HPER 101 Intro P.E.]	2	Gen Ed [Hist 110 or 120]	3
*Comp 120 Intro to Programming	3	Econ 180 American Economic	3
Comp 120 intro to Programming	17	Systems	3
	17	Systems	16-17
			10-17
	JUNI	OR	
Phys 301 Modern Physics	4	Phys 341 Thermal Physics OR	
Phys 381 Intermediate Physics Lab		322 Classical Mechanics	3-4
OR Phys 401 Electricity & Magnetism	3-4	Phys 452 Quantum Mechanics	
Gen Ed [Bio 101 or 110]	4	(or elective)	3
Gen Ed [HPER 160 Pers. Health]	2	Math Elective	3
General Education [Psy, Soc, Econ, Hist,		Gen Ed [Comm 100]	3
Geog]	3	Gen Ed [Literature]	3
16	-17		15-16
	SENI	OR	
Phys 401 Electricity & Magnetism OR	32.11	Phys 452 Quantum Mechanics	
Phys 381 Intermediate Physics Lab	3-4	(Or elective)	3
Gen Ed [Lit or Fine Arts]	3	Phys 498 Seminar	1
Gen Ed [Fine Arts]	3	Electives	12
Physics or Math Elective	3		16
Electives	3		10
	-16		
13	-10		

*Suggested elective (not strict require	ement)			
( ) Prerequisite [ ] Dept Recommendation Students should enroll in Comp 120 Com-		For Additional Information Contact:		
		Dr. Russell Phillips Office: 226 Science-Math Bldg.		
BACHELO	OR OF SCIE	NCE IN EDUCATION MAJOR CODE	E 0848	
		SMAJOR		
Pla		Teaching Field		
	0	order of Study		
	FRESI	HMAN		
1st Semester		2nd Semester		
Course	Hours	Course	Hours	
+ [Chem 101 General Chemistry I]	5	+ [Chem 102 General Chemistry II]		
Math 150 Calculus I	5	(Chem 101)	3	
Eng 101 Composition	3	Math 250 Calculus II (Math 150)	5	
Phys 201 General Physics	4	Eng 102 Composition	3	
Psy 120 Freshman Orientation	1	Phys 202 General Physics II	3	
	18		16	
	SOPH	OMORE		
Math 260 Calculus III (Math 250)	5	Phys 322 Classical Mechanics OR		
Phys 203 General Physics III	4	Phys 373 Electronic Circuits	3-4	
Psy 110 Psychology of Human		+ [Math 322 Differential Equations]		
Development	5	(Math 260)	3	
Gen Ed [Literature]	3	Psy 310 Educational Psychology		
	17	(Psy 110 or equivalent)	3	
		Bio 110 Man and Environment	4	
		Gen Ed [Hist 110 or 120]	3	
			16-17	
	JUN	NIOR		
Psy 302 Exceptional Child	2	Educ 300 Clinical Experience	2	
Phys 301 Modern Physics	4	Educ 330 Structures or Teaching	2 2 2	
Phys 381 or Physics Elective	3	Educ 331 Microteaching	2	
Gen Ed Humanities and Fine Arts	6	Educ Media	2	
HPER 160 Personal Health	2	Phys 322 Classical Mechanics		
	17	or		
		Phys 372 Electronic Circuits	3-4	
		PSc 120 Government: National, State		
		Local	3	
		HPER 101 Intro to P F	,	

	SEN	IOR
Phys 381 Intermediate Physics Lab OR Elective Phys 498 Seminar Gen Ed [Econ 180 American Economic System] Gen Ed [Comm 100 or 131] + Comp 120 Intro to Programming Electives + Suggested Electives	3 1 3 3 3 3	Educ 333 Teaching Science in Secondary Schools 2 Educ 402 Foundations of Education 2 Educ 422 Reading in the Secondary School 2 Educ 432 Critical Issues 2 Required Elective [Educ 412, 420, 423, or Psy 412] 2 Educ 462 Student Teaching Secondary 8 18
(Not strict requirements) ( ) Prerequisites [ ] Dept Recommendation		For Additional Information Contact: Dr. Russell Phillips Office: 226 Science-Math Bldg. Phone: (417) 624-8100 Ext. 226

16-17

#### BACHELOR OF ARTS POLITICAL SCIENCE Suggested Order of Study

**MAJOR CODE 2201** 

#### FRESHMAN

	FREST	IMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
PSc 120 U.S., States, & Local Govern	nment 3	Econ 180 or 201 American Economic	
Eng 101 Composition	3	System OR Macro	3
Hist 110 or 120 U.S. History	3	Eng 102 Composition	3
Math 110 Intro College Math	3	Comm 100 Oral Communications	3
HPER 101 Intro P.E.	2	Bio 101 General Biology	4
Psy 120 Freshman Orientation	1	Gen Ed [Literature or Fine Art]	3
	15		16
	SOPHO	OMORE	
Gen Ed [Literature or Fine Art]	3	PSc (Upper Division Elective Approve	d
Foreign Language	5	by Advisor]	
Phys 100 Fundamentals of Physica	ıl	Foreign Language	3 5
Science	5	Gen Ed [Social Science]	3
HPER 160 Personal Health	2	Electives	6
	15		17
	JUN	IOR	
PSc [Upper Division]	6	PSc [Upper Division]	6
Electives	6	Electives	9
Gen Ed [Humanities or Fine Art]	3		15
	15		
	SEN	IOR	
PSc [Upper Division Elective]	6	PSc [Upper Division Elective]	6
Electives	9	Electives	10
	15		16
		For Additional Information Contact: Dr. Donald R. Youst Office: Library Annex, Room 013 Phone: (417) 624-8100 Ext. 264	-

## BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0843 SOCIAL SCIENCE MAJOR Political Science Emphasis

Suggested Order of Study

1st Semester		2nd Semester	
Course He	ours	Course	Hours
PSc 120 U.S., State, & Local Government	3	Hist 110 U.S. History 1492-1877	3
Eng 101 Composition	3	Eng 102 Composition	3
Psy 110 Psychology of Human		Math 110 Intro College Math	3
Development	5	Econ 180 or 201 American Economic	
Gen Ed Literature	3	System/Macro Econ	3
Psy 120 Freshman Orientation	1	Bio 101 General Biology	4
	15		16
	SOPH	OMORE	
Hist 120 U.S. History 1877-Present	3	Hist 140 Western Civilization 1660-Pr	resent 3
Geography Elective	3	Gen Ed [Literature or Fine Art]	3
Hist 130 Western Civilization to 1660	3	Soc 110 Intro to Sociology	3
Phys 100 Fundamentals of Physical		Psy 302 Exceptional Child	2
Science	5	Psy 310 Educational Psychy	2
HPER 101 Intro to P.E.	2	HPER 160 Personal Health	2
	16		15

	JUN	IOR	
PSc Upper Division Elective	6	Hist [Upper Division U.S.]	3
Ed 300 Clinical Experiences	2	Hist [Upper Div European or Oriental]	3
Ed 330 Structures of Teaching	2	PSc [Upper Division Electives]	6
Ed 331 Microteaching	2	Gen Ed [Fine Art]	3
Ed 370 Instructional Media	2		15
	14		
	SEN	IOR	
PSc [Upper Division Electives]	6	Professional Semester	16
Soc [Upper Division Elective]	3		16
Hist [Upper Division U.S.]	3		
Comm 100 Oral Communications	3		
Ed 422 Reading in the Sec Sch	2		
	17		
[ ] Dept Recommendation			
		For Additional Information Contact:	

Prof. Annetta St. Clair Office: Library Annex. Room 012

Phone: (417) 624-8100 Ext. 247

**MAJOR CODE 5305** 

### ASSOCIATE OF SCIENCE PRE-ENGINEERING

The Math and Physical Science Departments at MSSC in cooperation with the Engineering Staff at the University of Missoure-Rolla have prepared a booklet entitled: "A Model Program for Engineering Transfers". This book lists the course sequence for students taking their first two or two and one-half years of an Engineering Science curruculum at MSSC and planning to transfer to UMR. The plan also includes the courses the student will take at UMR to complete his or her B.S. degree in various engineering disciplines. Although most of the engineering programs are standard for the first two years, there are a few differences and thus the student should meet with a pre-engineering advisor during his first semester. If a student wishes to transfer to a school other than Rolla, it is suggested that he review the catalogue of that school for any differences in their program and the UMR outline. College catalogues are available in the Reserve area of the MSSC Library. Any advisors that desire a copy of the booklet should contact the Math or Physical Science Departments.

#### Suggested Order of Study

	- 00	,	
	FRES	HMAN	
1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Hist 110 or 120 U.S. History	3
Math 150 Calculus I	5	Math 250 Calculus II	5
Phys 201 Gen Physics I	4	Phys 202 Gen Physics II	3
Chem 101 Gen Chemistry I	5	Econ 201 Principles/Economics	3
Psy 120 Freshman Orientation	1	*Gen Ed Humanities/Fine Arts/	
	18	Drafting	3
			17
	SOPH	OMORE	
Math 260 Calculus III	5	Math 322 Differential Eq.	3
Phys 203 Gen Physics III	4	Phys 312 Statics	3
Comp 120 Intro to Programming	3	Phys 372 Electronic Circuits	4
*Gen Ed Sociology or Psychology	3	Phys 341 Thermal Physics or Phys 322	
*Gen Ed Humanities/Fine Arts or		Classical Mech.	4-3
HPER 101 Intro to P.E. or HPER 16	0	*Comm 100 Oral Comm. or Gen Ed	
Personal Health	3-2	Humanities/Fine Arts	3
	18-17		17-16
*See pre-engineering advisor			

For Additional Information Contact:

Dr. Larry Martin

Office: 200 Reynolds Hall

OR

Dr. Russell Phillips

Office: 226s Reynolds Hall

## ASSOCIATE OF ARTS PRE-JOURNALISM Suggested Order of Study

**MAJOR CODE 7004** 

#### FRESHMAN

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Foreign Language	5	Foreign Language	5
Math 110 Intro to College Math	3	PSc 120 Government: National, State,	
Soc 110 Intro to Sociology	3	Local	3
Hist 110 or 120	3	Comm 100 Oral Communication	3
Psy 120 Freshman Orientation	1	Art 110 or Music 110	3
	18		17
	SOPHO	OMORE	
Literature	3	Philosophy 212 Ethics	3
Foreign Language	3	Phys 100 Fund Phys Science	5
Bio 101 General Biology	4	Eng 315 Exposition	3
Elective	3	Psy 100 General Psychology	3
Econ 201 Principles of Economics I	3	Elective	3
	16		17

Completion of the above requirements does not necessarily assure acceptance into a School of Journalism. The student is responsible for contacting his or her choice of Journalism School and requesting information pertaining to the proper procedure for applying for application into that school. This should be done in August before the student's sophomore year. Applications for admission are normally due in Frebruary. A 3.0 grade point average is required.

For Additional Information Contact: Mr. Richard Massa

Office: 117 Hearnes Hall
Phone: (417) 624-8100 Ext 228
Toll Free In Missouri: 1-800-492-4811

PRE-LAW

**MAJOR CODE 7008** 

A student who desires to go to law school should plan his or her curriculum with the pre-law advisor. Law schools set no specific course requirements, but do expect students to have a strong academic background. A pre-law student may select a major within almost any academic discipline, but should emphasize certain skills which will enable him or her to perform well on the Law School Admission Test and in the rigorous studies in law school. The student's interests and the type of law in which he or she plans to specialize will help determine the major.

Legal educators agree that the development of skills and habits conducive to legal reasoning is more important than subject matter. The student's college courses should be geared, therefore, to the development of:

- -A broad cultural background
- -Habits of thoroughness, intellectual curiosity and scholarship
- -The ability to organize materials and communicate the results
- -Verbal skills

Courses in literature, language, speech, composition, logic and semantics are directly concerned with cultivation of the necessary skills. A well-taught course in any department will serve the same objectives if it offers:

- -A variety of reading assignments selected from well-written sources
- -A large volume of well-directed class discussion
- -Ample opportunity to prepare and criticize written and oral reports

Questionnaires several years ago asked leaders of the Bench and Bar which prelaw subjects they considered most valuable. The following subjects were listed, in order of preference: English language and literature, government, economics, American history, mathematics, English history, Latin, logic and scientific method, and philosophy. Accounting and public speaking were also recommended.

Information about the Law School Admission Test (LSAT) can be obtained in the pre-law advisor's office. Students should become familiar with this information in order to assess their own academic strengths and weaknesses. A curriculum can then be chosen which will provide the most desirable background for the individual student. Undergraduate work and the Law School Admission Test (LSAT) are two major items considered by law school when they evaluate an applicant for admission.

For Additional Information Contact: Professor Annetta St. Clair Office: Library 012C Phone: (417) 624-8100 Ext 247

MAIOR CODE

### PRE-MEDICINE, PRE-DENTISTRY,

PRE-VETERINARY
Suggested Order of Study

Suggested Order of Study Pre-Dental 7002
(This program will also qualify the student for the Bachelor of Science in Biology.)

\*Pre-Wed 7005

\*Pre-Vet 7005

#### FRESHMAN

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Bio 101 General Biology	4	Bio 122 Zoological Survey (Bio 101)	3
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	
Math 140 College Algebra & Trigonor	metry	(Chem 101)	5
OR Math 150 Calculus w/Anal		Comp 120 Intro to Programming	
Geometry	5	(Math 130)	3
Gen Ed	2	Eng 101 Composition	3
Psy 120 Freshman Orientation	1	Comm 100 Oral Communications	3
	17		17
	SOPHO	OMORE	
Bio 112 Botany Survey (Bio 101)	3	Bio 305 Genetics (Bio 211 or 213)	4
Bio 211 Microbiology	5	Phys 152 Elementary Physics II (Phys 15	51) 3
(Bio 101 & Chem 102)		Psy 110 Psychology of Human	
Phys 151 Elementary Physics I (Math	140) 5	Development	5
Gen Ed	2	Bio 210 General Physiology (Bio 122 &	
Eng 120 Composition	3	Chem 102)	4
	18		16
	JUN	IOR	
Bio 331 Comparative Anatomy (B)	5	Bio 310 Cell Biology OR	
Chem 301 Organic Chemistry I		Bio 456 Immunology	3-4
(Chem 102)	5	Chem 302 Organic Chemistry II	
Econ 180 American Economic System	3	(Chem 300)	5
Gen Ed	3	Bio 462 Embryology (B)	5
	16	Gen Ed	3
			16-17
	SEN	IOR	
Bio 316 Economic Botany (A)	3	Bio 402 General Ecology (C)	4
Bio 431 Animal Physiology (B)		Bio 306 Human Anatomy & Physiology	(B) 5
OR Bio 433 Histology (B)	4-5	Gen Ed	8
Bio 490 Seminar	1	Math 310 Elementary Statistics	
Gen Ed	3	(Math 130)	3
Chem 201 Analytical Chem I	3		20

14-15

\*Pre-Vet students must also enroll in Animal Husbandry and Animal Nutrition prior to acceptance at the Univ. of Mo., Vet School.

Students should also check with the pre-med advisor about any specific professional school that he or she wishes to attend. The individual school may have some other specific requirement.

#### **General Education**

Hist 110 or 120	3
PSc 120	3
Literature/Fine Art	9
HPER	4

( ) Prerequisite
\*\*Offered Spring Semester Only

For Additional Information Contact: Dr. Vonnie R. Prentice (Pre-Med & Pre-Dental Dr. E. Sam Gibson (Pre-Vet Office: RH 308

Phone: (417) 624-8100 Ext. 278

### PRE-OPTOMETRY Suggested Order of Study

MAJOR CODE 7006

Requirements for admission vary from one School of Optometry to another. The courses listed below meet requirements for an A.A. degree at MSSC but may not be required at the second school. The student is responsible for obtaining a list of required courses that are acceptable to the School of Optometry that he or she plans to attend.

#### **FRESHMAN**

1st Semeste	er	2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composititon	3	Eng 102 Composition (Eng 101)	3
Math 150 Calculus (Algebra	&	Bio 121 Zoology	4
Trigonometry)	5	Psy 100 Gen Psychology	3
Hist 110 of 120 U.S. History	3	Chem 102 Gen Chem II	3
Chem 101 Gen Chem I (Alge	ebra	HPER 101 or 160	2
& Trigonometry	5		15
Psy 120 Freshman Orientation	on1		
	17		

#### **SOPHOMORE**

Phsy 151 (Algebra &		Phys 152 (Algebra &	
Trigonometry	5	Trigonometry)	3
Comm 100 Oral Communications		Econ 202 Principles of Economics	3
Eng 271 or 272 English Literature	3	Electives for transfer	9
Electives for transfer	6		15
	17		

( ) Prerequisite Course

For Additional Information Contact: Mr. Arthur Strobel Office: 224 Science Building

Phone: (417) 624-8100 Ext. 292

#### PRE-OPTOMETRY Suggested Order of Study

MAJOR CODE 7006

(This program will also qualify the student for the Bachelor of Science in Biology.)

1st Semester		2nd Semester	
Course	Hours	Course	Hours
*Bio 101 General Biology	4	Bio 122 Zoological Survey	3
*Chem 101 General Chemistry	5	*Chem 102 General Chemistry II	
Math 140 College Algebra & Trigo	nometry 5	(Chem 101)	5
Psy 120 Freshman Orientation	1	*Eng 101 Composition	3
Gen Ed HPER 101	2	Comp 120 Intro to Programming	
	17	(Math 130)	3
		*Comm 100 Oral Communications	3
			17

	SOPHO	OMORE	
*Bio 112 Botanical Survey (Bio 101)	3	Bio 211 Microbiology (Bio 101	
Bio 305 Genetics (Bio 101)	4	and Chem 102)	5
*Eng 102 Composition (Eng 101)	3	*Bio 210 General Physiology	
*Math 150 Calculus with Analytic		(Bio 122 and Chem 102)	4
Geometry (Math 140)	5	*Psy 100 General Psychology	3
Gen Ed HPER 160	2	Econ 180 American Economic System	3
	17	*Gen Ed Hist 110 or 120	3
			18
	IUN	NIOR	
*Phys 151 Elementary Physics I	5	*Phys 152 Elementary Physics II	
*Chem 301 Organic Chemistry I	5	(Phys 151)	3
Bio 433 Histology (B)	4	Chem 302 Organic Chemistry II	
*Psy 300 Child Development or		(Chem 301)	5
301 Adolescent Psychology	3	Bio 318 Cell Biology or Bio 456	
	17	Immunology	3-4
		*Math 310 Elementary Statistics	3
		Gen Ed	3
		1	7-18
	SEN	HOR	
Bio 316 Economic Botony (A)	3	Bio 402 General Ecology (C) or Bio 312	
Bio 431 Animal Physiology (B)	5	Environmental Biology (Fall only)	4
Bio 490 Seminar	1	Bio 306 Human-Physiology and	
Electives	4-5	Anatomy (B)	5
Gen Ed Political Science 120	3	Electives	3
	16-17	Gen Ed	5
			17

\*Indicate courses which satisfy minimum requirements for admission into Optometry School. Application may be made with 90 semester hours. Strong preference is given to applicants who hold the Bachelor's Degree.

( ) Prerequisite

For Additional Information Contact: Dr. Vonnie R. Prentice Pre-Professional Advisor

Office: RH 308

Phone: (417) 624-8100 Ext. 278

#### PRE-PHARMCY Suggested Order of Study

**MAJOR CODE 7007** 

Entrance requirements vary considerably from one Pharmacy School to another. The student should obtain a list of recommended courses from the Pharmacy School that he/she plans to attend and the dates to file applications for admission.

The Pharmacy School at the University of Missouri in Kansas City (UMKC) requires the following: Composition—3 hrs., Math (Algebra & Trigonometry or higher)—5 to 8 hrs., General Chemistry and Qualitative Chemistry—8 to 10 hrs., Electives in Humanities and Social Science to complete a total of 30 hours.

1st Semester		2nd Semester
Course	Hours	Course Hours
Chem 101 General Chemistry	5	Chem 102 General Chemistry (Chem 101) 5
Math 150 Calculus with Analytical		[Hist 110 or 120 U.S. History] 3
Geometry	5	Elective Math/PSc/Econ/Lit 6-8
Eng 101 Composition	3	14-16
[Psy 100 or Soc 110]	3	
Psy 120 Freshman Orientation	1	
	17	For Additional Information Contact:
( ) Prerequisite		Mr. Harrison Kash
[ ] Suggested Elective		Office: 224 Reynolds Hall
		Phone: (417) 624-8100 Ext. 292

2nd Semester

#### PRE-PHYSICAL THERAPY For Transfer to University of Missouri-Columbia Suggested Order of Study

#### **FRESHMAN**

1st Semester

Gen Ed [Phys 100]

Gen Ed [Literature]

Gen Ed [Humanities or Fine Arts]

Elective in Supporting Area

ist semester		2nd Semester	
Course	Hours	Course	Hour
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	
Math 140 Algebra & Trigonometry	5	Psy 311 Applied Statistics for	
Bio 121 General Zoology	4	Behavioral & Natural Sciences	
Psy 100 General Psychology	3	Hist 110 or 120 U.S. History	3
Psy 120 Freshman Orientation	1	Bio 221 Anatomy & Physiology (Bio	121) 5
	16	Comm 100 Oral Communications	3
			17
	SOPHO	DMORE	
Phys 151 Elementary College Physic	cs 5	Chem 301 Inorganic Chemistry (Ma	ath 140) 5
Psy 221 Psychology of Personal		Bio 210 General Physiology (Bio 12	
Adjustment	3	Humanities-Elective	6
Social Studies-Elective	3	-Apply for admission to Physical	
Humanities-Elective	6	Therapy School	
Psy 310 Ed Psychology	3	morapy serios:	15
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20		13
An Associate of Arts degree may be if one of the Humanities electives erature course and if the student h credits in HPER.	is a lit-	For Additional Information Contac Mr. David Tillman Office: Room S-308C Phone: (417) 624-8100 Ext. 278 Toll Free in Mo: 1-800-492-4811	ι.
	BACHELOF	R OF ARTS MAJOR COD	F 2000
	PSYCHOLO	,	L 2000
Si	uggested Or	rder of Study	
1st Semester	FRESH		
Course Ist Semester		2nd Semester	
	Hours	Course	Hours
Psy 110 Psy of Human Dev.	5	Eng 102 Composition (Eng 101)	3
Eng 101 Composition	3	Hist 110 or 120	3
Gen Ed [Math 131]	3 2	Gen Ed [Humanities or Fine Arts]	
HPER 101 Intro to P.E.	,		
HPER 160 Personal Health		Biology	4
120 5 1 0::	2	Elective	4
Psy 120 Freshman Orientation	<u>1</u>		3 4 3 16
Ssy 120 Freshman Orientation	2		3
Psy 120 Freshman Orientation	2 1 16 <b>SOPHO</b>	Elective	3
Psy 311 Applied Statistics (Psy 100 c	2 1 16 <b>SOPHO</b>	Elective	3

3

3

17

Econ 180 American Economic System

5

3

3

3

3 17

(Psy 311)

Elective

Gen Ed [Comm. 100]

Elective in Supporting Area

or other Econ course

	JUN	IOP	
a 442 Dh. dalariad Barahalagu	JUN	**Psy 411 Sensation & Perception	
Psy 442 Physiological Psychology	3	(Psy 312)	3
(Psy 312) Foreign Language 101 [French or	3	PSc 120 Government: U.S., State, Local	
	5	**Foreign Language 102 [French	
German] Electives in Supporting Area	3-5	or German]	5
	4-5	Elective in Supporting Area	3
Electives	15-18	Psy Elective	3
	15-10	13y Elective	17
	SEN	IOR	
Psy 452 History & Systems (Psy 311)		**Psy 481 Senior Thesis	1
Psy 480 Senior Seminar	2	Psy 499 Independent Study (Consent)	3
Psy 498 Seminar (Consent)	3	**Psy 451 Learning & Memory	
Electives in Supporting Area	3	(Psy 310 or 311)	
Electives	3	Elective in Supporting Area	(
Psy Elective	3	Elective	
Sy Licetive	17		1
	SUPPORTI	NG AREAS	
Art	21	English/Literature	2
Art	21	Journalism	2
Music	21	Marketing/Management	2
Economic/Finance	21	Political Science	2
History			2
Law Enforcement	21	(Others by permission)	
Military Science	21		
Sociology	21		
*Course offered Fall Semester only			
**Course offered Spring Semester o	nly	For Additional Information Contact:	
( ) Prerequisite	,		
( ) Freiequisite		Dr. J. Truman Volskay	
1 Dept Recommendation		O//: 000 T   11	
[ ] Dept Recommendation		Office: 209 Taylor Hall Phone: (417) 624-8100 Ext. 306	
	BACHELOR	Phone: (417) 624-8100 Ext. 306	2000
		Phone: (417) 624-8100 Ext. 306  OF SCIENCE MAJOR CODE	2000
	PSYCHOLO	Phone: (417) 624-8100 Ext. 306  OF SCIENCE DGY MAJOR  MAJOR CODE	2000
	PSYCHOLO uggested O	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR order of Study	2000
s	PSYCHOLO uggested O	Phone: (417) 624-8100 Ext. 306  OF SCIENCE MAJOR CODE OGY MAJOR order of Study  HMAN	2000
S 1st Semester	PSYCHOLO uggested O FRES	Phone: (417) 624-8100 Ext. 306  OF SCIENCE MAJOR CODE OGY MAJOR Order of Study HMAN  2nd Semester	
S  1st Semester  Course	PSYCHOLO uggested O FRESI Hours	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR order of Study  HMAN  2nd Semester  Course	
S  1st Semester  Course Psy 110 Psy of Human Dev.	PSYCHOLO uggested O FRESI Hours 5	Phone: (417) 624-8100 Ext. 306  OF SCIENCE MAJOR CODE OGY MAJOR Order of Study  HMAN  2nd Semester Course Eng 102 Composition (Eng 101)	
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition	PSYCHOLO uggested O FRES Hours 5 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology	
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130	PSYCHOLO uggested O FRESI Hours 5 3 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts]	
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130  HPER 101 Intro to P.E.	PSYCHOLO uggested O FRESI Hours 5 3 3 2	Phone: (417) 624-8100 Ext. 306  OF SCIENCE MAJOR CODE  OGY MAJOR  Order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature	
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health	PSYCHOLO uggested O FRESI Hours 5 3 3 2 2	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts]	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health	PSYCHOLO uggested O FRESI Hours 5 3 3 2 2 1	Phone: (417) 624-8100 Ext. 306  OF SCIENCE MAJOR CODE  OGY MAJOR  Order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health	PSYCHOLO uggested O FRESI Hours 5 3 2 2 1 16	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition  Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation	PSYCHOLO uggested O FRESI Hours 5 3 2 2 1 16 SOPH	Phone: (417) 624-8100 Ext. 306  OF SCIENCE MAJOR CODE OGY MAJOR Order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100	PSYCHOLO uggested O FRES  Hours 5 3 2 2 1 16 SOPH or 110) 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR OF Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311)	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math	PSYCHOLO uggested O FRESI Hours 5 3 3 2 2 1 16 SOPH or 110) 3 131 or	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Order of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130)	PSYCHOLO uggested O FRESI Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR  Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math	Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR  Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts]	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130  HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130)	PSYCHOLO uggested O FRESI  Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or 5 Local 3 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR  Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State &	Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR  Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts]	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130  HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120	PSYCHOLO uggested O FRESI  Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or 5 Local 3 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR  Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts]	Hou
S  1st Semester Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120	PSYCHOLO uggested O FRESI  Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3 3 3-5 17-19	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR  Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts]	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120 Elective in Supporting Area	PSYCHOLO uggested O FRESI  Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3 3 3-5 17-19 JUN	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE  Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts] Elective in Supporting Area	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120 Elective in Supporting Area	PSYCHOLO uggested O FRESI  Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3 3 3-5 17-19  JUN y 312) 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Prider of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts] Elective in Supporting Area	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120 Elective in Supporting Area	PSYCHOLO uggested O FRESI  Hours 5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3 3 3-5 17-19  JUN y 312) 3	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR  Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts] Elective in Supporting Area	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120 Elective in Supporting Area  Psy 442 Physiology Psychology (Psy 452 History & Systems (Psy 31) Elective in Supporting Area	PSYCHOLO uggested O  FRESI  Hours  5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3 3 -5 17-19  JUN y 312) 3 1) 3 6	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE  Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts] Elective in Supporting Area  NIOR  **Psy 411 Sensation & Perception (Psy 312)  **Psy 451 Learning & Memory	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120 Elective in Supporting Area  Psy 442 Physiology Psychology (Ps' Psy 452 History & Systems (Psy 31)	PSYCHOLO uggested O  FRESI  Hours  5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3 3 3-5 17-19  JUN y 312) 3 1) 3 6 3-6	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE  Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts] Elective in Supporting Area  NIOR  "Psy 411 Sensation & Perception (Psy 312) "Psy 451 Learning & Memory (Psy 310 or 311)	Hou
S  1st Semester  Course Psy 110 Psy of Human Dev. Eng 101 Composition Math 131 or 130 HPER 101 Intro to P.E. HPER 160 Personal Health Psy 120 Freshman Orientation  Psy 311 Applied Statistics (Psy 100 Phys 100, 151 or Chem 101 (Math 130) PSc 120 Government: U.S., State & Hist 110 or 120 Elective in Supporting Area  *Psy 442 Physiology Psychology (Psysy 452 History & Systems (Psy 31) Elective in Supporting Area	PSYCHOLO uggested O  FRESI  Hours  5 3 2 2 1 16 SOPH or 110) 3 131 or Local 3 3 -5 17-19  JUN y 312) 3 1) 3 6	Phone: (417) 624-8100 Ext. 306  OF SCIENCE OGY MAJOR Index of Study  HMAN  2nd Semester  Course Eng 102 Composition (Eng 101) Bio 101 General Biology Gen Ed [Humanities and Fine Arts] Literature Elective  OMORE  Psy 312 Experimental Psych (Psy 311) Econ 180 American Economic System Comm 100 Speech Techniques Gen Ed [Humanities or Fine Arts] Elective in Supporting Area  NIOR  **Psy 411 Sensation & Perception (Psy 312)  **Psy 451 Learning & Memory	Hou

D 400 S : (G 0			IIOR	
Psy 498 Seminar (Consent)		3	Psy 499 Independent Study (Consent)	3
Psy 480 Senior Seminar		2	Psy 481 Senior Thesis	1
Elective in Supporting Area		3	Electives	9-12
Electives		<u>9</u> 17		13-16
			urn	
Ten hours are required from M to all other requirements. Thes	ath, Comput se replace th	er Scier	<b>HER</b> nce, Chemistry, Biology, and/or Physics, in ad gn language requirement.	dition
*Course offered only in Fall				
**Course offered only in Sprir	ng		For Additional Information Contact:	
( ) Prerequisite			Dr. J. Truman Volskay	
[ ] Dept Recommendation			Office: 209 Taylor Hall	
			Phone: (417) 624-8100 Ext. 306	
RAC	HELORO	E SCIE	NCE IN EDUCATION MAJOR CODE (	946
			L EDUCATION MAJOR CODE	040
1316.			rder of Study	
1st Semester			2nd Semester	
Course	Hor	ırs	_	Hours
Psy 110 Human Growth & De		5	Psy 382 Intro to Behavior Management	
Eng 101 Composition	reropinent	3	Eng 102 Composition (Eng 101)	3
HPER 101 Intro to P.E.		2	HPER 370 School Health	3
*Gen Ed		6	Math 131 Finite Math	3
Psy 120 Freshman Orientation		1	*Gen Ed	5-6
13y 120 Hestiman Orientation		<del>'</del> 17		17-18
		OPH	OMORE	
Psy 311 Statistics (Psy 110 or	_	OFFIC	Psy 310 Educational Psych	2
130 or 131)	100 a Main	3	Ed 342 Intro to Dev. Reading	3
Psy 302 Exceptional Child		2	Ed 324 Intro to Spec. Ed.	3
*Gen Ed	10-		*Gen Ed	9
Gen Eu	15-		Gen Ed	17
			IOR	
Psy 312 Experimental Psych (P	Dev 211)	5	Per 422 Abnormal Perich (7 hrs. Peri)	2
Ed 330 Structures	Sy 311)		Psy 432 Abnormal Psych (7 hrs. Psy)	3
		2	Ed 404 Methods of Teaching Children	2
Ed 331 Microteaching Psy 442 Physiological Psy or P	cv 411	2	with Learning Disabilities	3
Sens. & Perc.	5y 411	3	Disability	
Ed 343 Individualized Reading		3	Ed 470 Diagnostic & Remedial Reading	2
Ed 370 Instruct. Media		2	Ed 430 Language Development for Exceptional Child	3
Ed 370 Histract. Media		17	Ed 474 Educational-Psychological Testin	
		17	Psy 451 Learning & Memory	3
			13y 451 Learning & Memory	17
		SEN	IOP	.,
Ed. 446 Practicum in Spec. Ed.		3	Psy 412 Measurement & Evaluation	2
*Gen Ed		3	Ed 402 Foundations of Education	2
Ed 420 Intro to Counseling		2	Ed 432 Critical Issues	2
Ed 403 Methods of Teaching the	ne Mentally	2	Ed 407 Diagnostic Prescriptive Teaching	
Handicapped	ic wichtany	3	Ed 444 Student Teaching	8
Ed 405 Methods of Teaching C	hildren with		Ed 444 Student Teaching	
Behavior Disorders	illiaren wia	3		17
Ed 312 Probs. in Teach. Arith.		2		
Ed 312 11003, III Teach. Alith.		<u>-2</u> 16		
( ) Prerequisite				
			For Additional Information Contact:	
			Dr. J. Truman Volskay	
			Office: 209 Taylor Hall	
			Phone: (417) 624-8100 Ext 306	
			7110.11C. (417) 024 0100 EXC 300	

#### ASSOCIATE OF SCIENCE RADIOLOGIC TECHNOLOGY Suggested Order of Study

**MAJOR CODE 5207** 

#### FIRST YEAR

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Rad 101 Intro to Radiology	3	Rad 132 Principles of Radiographic	
Rad 170 Radiologic Physics I	3	Exposure	3
Rad 142 Radiographic Positioning I	3	Rad 241 Radiographic Positioning II	3
**Bio 221 Human Anatomy & Physiolog	y 5	Bio 240 Radiation Biology	3
HPER 101 Physical Education	2	Math 30 Intermediate Algebra	
Psy 120 Freshman Orientation	1	OR Math 130 College Algebra	3
	17	Psy 100 General Psychology	3
			15
	*SUA	AMER	
Rad 160 Film Critique	2		
Rad 180 Practicum in Radiology I	4		
3,	6		
	SECON	D YEAR	
Rad 111 Medical Terminology	3	Rad 121 Patient Care and Special	
Rad 252 Radiographic Positioning III	3	Procedures	3
Chem 100 Intro to Chemistry	5	Rad 282 Practicum Radiology II	3
Eng 101 Composition	3	Gen Ed [Hist 110 or PSc 120]	3
Psy 221 Psychology of Personal		Comm 100 Oral Communications	3
Adjustment	3	OA 101 Typewriting I	3
	17	Gen Ed [Literature or Fine Art]	3
			18
	*SUN	AMER	
Rad 290 Practicum in Radiology III	3		
Rad 299 Advanced Radiology	3		
	6		

\*Summer classes meet a minimum of 12 weeks.

For Additional Information Contact: Mr. James K. Maupin Office: 113 Police Academy Phone: (417) 624-8100 Ext. 272

## SECRETARIAL-TYPIST CERTIFICATE ONE-YEAR SCHEDULE Required Order of Study MAJOR CODE 5065

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Comm 100 Oral Communications	3	OA 231 Secretarial Machines	3
OA 101 Typewriting I	3	OA 102 Typewriting II	3
OA 120 Intermediate Shorthand	3	OA 220 Dictation and Transcription	
Eng 101 Composition	3	(OA 120 & OA 102)	3
GB 115 Business Math/Calculators	3	GB 320 Business Communication	3
	15	Acct 201 Principles of Accounting I	3
( ) Prerequisite			15

For Additional Information Contact:
Dean of School of Business
Office: 117 Business School Bldg.

Phone: (417) 624-8100 Ext. 319

<sup>\*\*</sup>Placement in Bio 221 will depend on pre-entrance zoology test scores or completion of Bio 121.

### BACHELOR OF ARTS SOCIOLOGY

**MAJOR CODE 2008** 

#### Suggested Order of Study

#### FRESHMAN

	FRES	HMAN	
1st Semester		2nd Semester	
Course	Hours	6	Hours
Soc 110 Intro to Sociology	3	[Soc 121 Family]	3
Eng 101 Composition	3	Eng 102 Composition	3
Hist 110 or 120 U.S. History	3	PSc 120 U.S., State, Local Government	3
Gen Ed [Literature or Fine Art]	3	Econ 180 or 201 American Economic	3
Elective	3	System/Macro Econ	3
Psy 120 Freshman Orientation	1	[*Bio 121 Zoology]	4
	16		16
	SOPHO	OMORE	
Soc 210 Social Problems	3	Soc Elective	3
Foreign Language	5	Foreign Language	5
*Gen Ed [Literature or Fine Art]	3	*Phys 100 Fundamentals of Physical	3
*Math 110 Intro College Math	3	Science	5
Comm 100 Oral Communications	3	HPER 101 Intro to P.E.	2
	17		15
	JUN	IOR	
Soc 311 Social Stratifications	3	Soc Elective	3
Soc 321 Social Institutions	3	Supporting Area	6
*Gen Ed [Fine Arts]	3	Electives	7
**Psy 311 Applied Statistics	3	_	16
HPER 160 Personal Health	2		10
	14		
	SENI	IOR	
Soc 421 Social Theory	3	Soc 432 Social Investigations	3
Soc [Upper Division Elective]	3	Soc Elective	3
Supporting Area	6	Supporting Area	3
Electives	3	Electives	6
	15	_	15
**Psy 311 or Math 310 or GB 321			13
[ ] Dept Recommendation		Fan Addisional L. G.	
		For Additional Information Contact:	
15 credit hours in a supporting area is	also	Dr. Conrad Gubera OR	
required. The supporting area must	be ap-	Dr. Judith Conboy	
proved by the major advisor.		Office: Library Annex, Room 014 Phone: (417) 624-8100 Ext. 264	
RA	CHELOR	OF SCIENCE MAIOR CODE 22	20

## BACHELOR OF SCIENCE SOCIOLOGY

**MAJOR CODE 2220** 

### Suggested Order of Study

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Soc 110 Intro to Sociology	3	Soc 152 Anthropology	3
Eng 101 Composition	3	Eng 102 Composition	3
Hist 110 or 120 U.S. History	3	PSc 120 U.S. National, State, &	3
Econ 180 or 201 American Econor	nic Sys-	Local Government	3
tem/Macro Economics	3	Comm 100 Oral Communications	3
Elective	3	Bio 101 General Biology	3
Psy 120 Freshman Orientation	1	Dio Tot General Biology	4
/ · · · · · · · · · · · · · ·	4.5		16
	16		

Gen Ed [Literature of Fine Art]

Psy 110 Psychology of Human

Soc 321 Social Institutions

Geog 211 Regions and Nations

Psy 310 Educational Psychology

Educ 422 Reading in Sec. Sch.

European Hist-Upper Division

Development

Sociology Elective

C : I Flanting (with approval		Sociology Elective	3	
Sociology Elective (with approval		Phys 100 Fundamentals of Physical		
of advisor)	3	Science	5	
Math 131 [Finite Math]	3	Gen Ed [Lit or Fine Art]		
Gen Ed [Literature]	3	Gen Ed [Psy, Hist, PSc, Geog]		
Geog 211, 311, or 322 HPER 101 Intro to P.E.	2	HPER 160 Personal Health	2	
HPER 101 Intro to P.C.	14	THE RESERVE TO SERVE THE PROPERTY OF THE PROPE	16	
	JUN 3		3	
Soc 311 Social Stratification	Soc 362 Deviant Behavior			
Sociology Elective	3 Sociology Elective			
Comp 100 Intro to Data Processing	3	Comp 120 Intro to Programming	3	
Gen Ed [Fine Art]	3	Supporting Area	3	
Supporting Area	3	Psy 311 or Math 310 Statistics	3	
	15		15	
	SEN	IOR		
Soc 421 Sociological Theory	3	Soc 432 Sociological Research Methods	3	
Sociology Elective	3	Sociology Elective	3	
Supporting Area	6	Supporting Area	3	
Electives	4	Electives	7	
Electives	16		16	
[ ] Dept Recommendation	10			
[ ] Dept Recommendation		For Additional Information Contact:		
A supporting area of 15 hours may be selected. The student selects this area in sultation and approval of his/her advis	con-	Dr. Conrad Gubera or Dr. Ray Kellner Office: Library Annex, Room 014 Phone: (417) 624-8100 Ext 264		
		NCE IN EDUCATION MAJOR CODE 08	343	
		ENCE MAJOR		
Sc	ciology	Emphasis		
Sugg	ested O	rder of Study		
	FRESI	HMAN		
1st Semester	11123	2nd Semester		
	lours	Course	lours	
Soc 110 Intro to Sociology	3	Soc 121 Family	3	
Eng 101 Composition	3	Eng 102 Composition	3	
Hist 110 U.S. History 1492-1877	3	Hist 120 U.S. History 1877-Present	3	
Econ 180 American Economic System	3	Math 110 Intro College Math	3	
HPER 101 Intro to P.E.	2	PSc 120 U.S., State & Local Governmen	t 3	
Psy 120 Freshman Orientation	1	HPER 160 Personal Health	2	
Psy 120 Freshman Orientation	15	THER TOO TELESCIAL TREATME	17	
			. ,	
	SOPH	OMORE		
Soc 210 Social Problems	3	Sociology Elective	3	
Hist 130 Western Civilization to 1660	3	Hist 140 Western Civilization 1660		
C 5100 restern of Cine And	2	to Present	3	

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to Present

Bio 101 General Biology

Psy 302 Exceptional Child

Phys 100 Fund of Phys Sci

Ed 330 Structure of Teaching

Political Sci-Upper Division

Ed 300 Clinical Experiences

U.S. Hist-Upper Division

Ed 331 Microteaching

Gen Ed [Literature]

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	SEN	HOR	
oc Upper Division Electives 6		Professional Semester	
Comm 100 Oral Communications	3		
U.S. Hist-Upper Division	3		
out that oppor bittiston	15		
[ ] Dept Recommendation	13		
		For Additional Information Contact:	
		Dr. Conrad Gubera Office: Library Annex, Rm. 012 Phone: (417) 624-8100 Ext. 247	
	BACHELO	R OF ARTS MAJOR CODE	1105
	SPANISH	MAJOR	
Sug	gested O	rder of Study	
		IMAN	
1st Semester	· KESI	2nd Semester	
Course	Hours	Course	Hours
Span 101 Beginning Spanish	5	Span 102 Intermediate Spanish	
Eng 101 Composition	3	Eng 102 Composition	3
Econ 180 American Economic System	3	Hist 110 or 120 U.S. History	3
Gen Ed [Literature]	3	Gen Ed [Literature or Fine Art]	3
Psy 120 Freshman Orientation	1	HPER 101 Intro P.E. Activity	2
	15		16
General Education Requiremen	its	Spanish Requirements	
Eng 101 & 102 or equivalent	6	Span 101 Beginning Spanish	5
Comm 100, 131, 303	3	Span 102 Intermediate Spanish	5
Math 110 or higher	3	Span 201 Readings & Conversation	3
HPER 101 and 160	4	Span 202 Advanced Read & Conv	3
Hist 110 or 120	3	Span 332 Survey of Spanish American	1
PSc 120	3	Literature	3
Econ 180 or higher	3	Span 319 Survey of Spanish Lit from	
Psych, Socio, Econ, Geog, Hist, PSc	3	to the Present	5
Literature  Art, Music, Theatre, Literature, Philo	3	Span 320 Spanish Syntax and Compo	sition 5
(1 from 2 areas)	6	Span 440 The Novelistic Trad: from Cervantes to Gabriel	
Bio 101 or higher	4	Garcia Marquez	2
Phys 100 or higher	5	Span 499 Independent Study	3
Foreign Language	10	Span 455 macpendent study	2
0.1.0.1.0.1	56	Other: One of the following	
	30	PSc 332 Comparative Government	
		Latin America	3
		PSc 321 International Relations	3
		Other: One of the following	
		Comm 493 International Comm	3
		Geog 412 Geography and Culture of	
		Latin America	3
			40
Minor or electives with approval of Spa			
adivsor	28	For Additional Information Contact:	
I Dont Bossessedation		Dr. Carmen Carney	
Dept Recommendation		Office: 04 Library	
		Phone: (417) 624-8100 Ext 332	

## BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0847 SPANISH MAJOR Suggested Order of Study

	2nd Semester	
Hours	Course Ho	urs
5	Span 102 Intermediate Spanish	5
3	Eng 102 Composition	3
		3
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15	Development	16
nts		
	Spanish Requirements	
	*Span 101 Beginning Spanish	5
	*Span 102 Intermediate Spanish	2
4	*Span 201 Readings & Conversation	3
3		3
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panish	*Span 499 Independent Study	
	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm	n
	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following	n
	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America	n
	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following	n
	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin	n
panish	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America	n
panish 5	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America	n
panish  5 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America	n
5 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America	n
5 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America	n
5 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America	n
5 2 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America PSc 321 International Relations	n
5 2 2 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America	n
5 2 2 2 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America PSc 321 International Relations	n
5 2 2 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America PSc 321 International Relations  *Plan A-One of two teaching fields.	n
5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America PSc 321 International Relations	n
5 2 2 2 2 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America PSc 321 International Relations  *Plan A-One of two teaching fields.	n
5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	*Span 499 Independent Study  Other: One of the following Comm 493 International Comm Geog 412 Geography and Culture of Latin America  Other: One of the following PSc 332 Comparative Government Latin America PSc 321 International Relations  *Plan A-One of two teaching fields.  For Additional Information Contact:	3
	5 3 3 1 15 nts	Hours  Span 102 Intermediate Spanish Eng 102 Composition Hist 110 or 120 U.S. History Span 102 Intermediate Spanish Psy 110 Psychology of Human Development  Span 101 Beginning Spanish Span 102 Intermediate Spanish Span 102 Intermediate Spanish Span 201 Readings & Conversation Span 202 Advanced Read & Conv Span 332 Survey of Spanish American Literature Span 319 Survey of Spanish Lit from El Cid to the Present Span 320 Spanish Syntax and Composition

#### BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0844 **SPEECH EDUCATION**

#### Plan B-Single Teaching Field Suggested Order of Study

#### FRESHMAN

		FRESI	HMAN	
	1st Semester		2nd Semester	
Course		Hours		Hours
	Oral Communication	3	Comm 121 Forensics Workshop	1
	1 Forensics Workshop	2	Comm 131 Voice & Articulation	3
	omposition	3	Eng 102 Composition	3
Econ 180 /	American Economic System	3	Math 110 Intro to College Math	3
	J.S. History	3	PSc 120 U.S., State & Local Governmen	
Psy 120 Fr	eshman Orientation	1	Comm 103 Bus and Prof Speech	3
		15	11	16
		SOPHO	OMORE	
	Small Group Comm	3	Ed 302 Exceptional Child	2
	ychology of Human		Psy 310 Educational Psych	2
Develop		5	Bio 101 General Biology	4
Phys 100 F	undamentals of Physical		HPER 101 P.E. Activity	2
Science		5	Ed 300 Clinical Experience	2
	Interpersonal		Comm 213 Argumentation & Debate	3
Commun	nication	3	Ed 422 Tch Rdg in Sec/Elem Schools	2
		16		
		JUN	IOR	
	Organizational	IST ME	Comm 212 Oral Interpretation	3
Commun		3	Th 332 History of Theatre	3
	tory of Theatre	3	Comm 221 Forensics Workshop	1
	Forensics Workshop	2	Ed 330 Structure of Teaching	2
	Personal Health	2	Ed 331 Microteaching	2
Electives		5	Th 142 Theatre Techniques	3
Theatre lab	oratory	2	Ed 370 Media	2
		17	MANUFACTURE OF THE PROPERTY OF	16
		SEN	IOR	
Comm 412	Political and Social		Professional Semester	16
Commun	ication	3	- Torestonal Semester	16
Comm 498	Seminars/Elective	3		10
Th 241 or 7	Th 351	3		
Gen Ed [Lite	erature]	3		
Electives		2		
		14		
[ ] Dept R	ecommendation		and the Common and the least presidents.	
			For Additional Information Contact:	
			M. Dishard M.	

Mr. Richard Massa

Office: 117 Hearnes Hall

Phone: (417) 624-8100 Ext. 228

[ ] Dept Recommendation

### BACHELOR OF ARTS THEATRE

#### **MAJOR CODE 1007**

#### Suggested Order of Study

1st Semester		2nd Semester	
Course	Hours	Course	Hours
Th 121 or 211 Theatre Lab	2	Th 122 or 222 (Lab)	2
Gen Ed [Th 110 Theatre Appreciation]	3	Th 142 Theatre Technology	3
Gen Ed [Comm 100 or 131]	3	Gen Ed [Biological Science]	4
Gen Ed [Eng 101 Composition]	6	Gen Ed [Eng 102 Composition]	3
Gen Ed [Hist 110 or 120]	3	Gen Ed [PSc 120 U.S., State,	
Gen Ed [HPER 101 or equiv]	2	Local Government]	3
Psy 120 Freshman Orientation	1	Gen Ed [HPER 160 Health]	3 2
AL CONTRACTOR OF THE PARTY AND ADDRESS OF THE	17		17
	SOPHO	OMORE	
Th 241 Acting I	3	Th 231, 232, 233, Theatre Practicum	1
Elective [Th 221 or 121 Lab]	2	Th 222, or 122 Theatre Lab	2
Gen Ed [Foreign Language]	5	Gen Ed [Foreign Language]	5
Gen Ed [Math 110 or equiv]	3	Gen Ed [Physical Science]	5
Gen Ed [Psy 100 General Psychology]	3	cent de [mystean delenter]	15
	16		13
		HOR	
Th 254 Direction I			
Th 351 Directing I	3	Th 322 Lab (Elective)	2
Th 341 Acting II	3	Th 362 State Costume	3
Th 441 Stage Design (Th 142)	3	Th 372 Directing II	3
Th 321 Lab (Elective)	2	Art 302 Art Hist or Art 301	3
Hist 130 Western Civilization	3	Eng Literature (Elective)	3
Art 100 Composition or Art 130	3		14
	17		
	SEN	IOR	
Th 331 History of Theatre	3	Th 332 History of Theatre	3
Th 431 Creative Drama	3	Th 422 Acting III or Th 431	3
Elective [Bus 101 Intro to Business,		Elective [Th 122 or 221 Lab]	2
Accounting 201 or Econ 201]	3	Elective [Eng 451 Shakespeare]	3
Elective [Eng 450 Shakespeare or Eng :	360	Elective [Acct 201 or Econ 202	
20th Century Drama]	3	or Bus 101]	3
Econ 180	3	T 15 AT 10	14
	15		bl mail
Additional recommended electives:			
Comm 210 Discussion Techniques,		For Additional Information Contact:	
Jour 241, Comm 215 Oral Interpreta	ation,	Mr. Milton W. Brietzke	
Eng 311, 312 American Literature,		Office: Taylor Auditorium, 243	
Radio and TV Newswriting			
man la		Phone: (417) 624-8100 Ext. 248	
( ) Prerequisites			

## BACHELOR OF SCIENCE IN EDUCATION MAJOR CODE 0844 SPEECH AND THEATRE

#### THEATRE EMPHASIS

Plan B-Single Teaching Field Suggested Order of Study

1st Semester		2nd Semester	
Course	Hours	Course	ours
Th 121 or 221 Theatre Lab	2	*Th 122 or 222 Theatre Lab	2
Gen Ed [Th 110 Theatre Appreciation]	3	Gen Ed [Eng 102 Composition]	3
Gen Ed [Eng 101 Composition]	3	Gen Ed [Bio 101 or equiv]	4
*Gen Ed [Comm 100 Oral		Psy 110 Psychology of Human Developm	nent
Communications or Comm 131 Voice	e	representation of training beveloping	5
Articulation	3	*Comm 212 Oral Interpretation	3
Gen Ed [Hist 110 or 120]	3		17
Gen Ed [HPER 101 or equiv]	2		17
Psy 120 Freshman Orientation	1		
75, 126 Freshman Otternation	17		
		OMORE	
Th 241 Acting I or Th 341 Acting II	3	*Th 142 Theatre Techniques	2
Th 232, 233 Theatre Practicum	2		3
Gen Ed [Math 110 or equiv]	3	Gen Ed [Phys 100 Fundamentals Physical	-
Gen Ed [PSc 120 U.S., State, Local	3	Science or equiv	5
Government]	2	Psy 310 Educational Psychology	2
	3	Gen Ed [Eng 271 or 272 English Literature	
Gen Ed [HPER 160 Personal Health]	2	Comm 213 Argument & Debate	3
Gen Ed [Eng 180 or 181			16
Masterpieces World Literature]	3		
	16		
Th 251 Discretion I		IOR	
Th 351 Directing I	3	Th 362 Stage Costume	3
Th 331 History of Theatre	3	*Th 332 History or Theatre	3
*Th 341 Acting II or Th 241 Acting I	3	*Th 372 Directing II	3
Th 441 Stage Design (Th 142)	3	Eng 315 Exposition (Elective)	3
Comm 121-422	3	Ed 330 Structures of Teaching	2
Ed 300 Clinical Experiences	2	Ed 331 Micro Teaching Lab	2
	14		16
		IOR	
Comm 210 or Comm 215	3	Ed 342 Teaching Methods of Speech	
Psy 302 Exceptional Child	2	and Theatre	
Th 121 or 221 Theatre Lab (Elective)	2	Professional Semester	16
Electives (See below)	3		
Econ 180 American Economic System Ed 422 Reading in Secondary School	3 2		
ta 122 Heading III Secondary School	13		
	13	*Course Required for Plan A-one of two	
		teaching fields	
		For Additional Information Contact:	
	, Mu-		
sic, History, Literature, or Theatre			
		Filone: (417) 624-6100 Ext. 248	
( ) Prerequisite [ ] Dept Recommendation Electives recommended in Art, Business sic, History, Literature, or Theatre		*Course Required for Plan A-one of two teaching fields  For Additional Information Contact: Mr. Milton W. Brietzke Office: AU 243 Phone: (417) 624-8100 Ext. 248	

## SAUSHMAN OF SCIENCE INTEDUCATION AND ECOLOUSING

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Suggested Grider of Study

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